



USAID
FROM THE AMERICAN PEOPLE

UGANDA

FEED THE FUTURE COMMODITY PRODUCTION AND MARKETING ACTIVITY

Year One Annual Report

March 2013-September 2014



October 2014

This publication was produced for review by the United States Agency for International Development. It was prepared by Chemonics International Inc.

USAID/UGANDA FEED THE FUTURE COMMODITY PRODUCTION AND MARKETING ACTIVITY

**Year One Annual Report
March 2013-September 2014**

Contract No. AID-617-C-13-00003

Submitted to USAID/Uganda

October 31, 2014

DISCLAIMER

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Table of Contents

LIST OF ACRONYMS	v
KEY ACCOMPLISHMENTS AND LESSONS LEARNED	vi
1.0 MAIZE: VALUE CHAIN INTERVENTIONS AND OUTCOMES	1
IR 1: INCREASED CROP PRODUCTIVITY	1
Sub-IR 1.1 Increased Use of Farm Management Practices.....	1
Sub-IR 1.2 Increased Use of High Quality Agricultural Inputs	2
Sub-IR 1.3 Increased Access to Production Support Services.....	2
IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS.....	4
Sub-IR 2.1 Improved Market Linkages	4
Sub-IR 2.2 Increased Access to Market Support Services.....	5
Sub-IR 2.3 Improved Post-Harvest Handling	5
2.0 BEANS: VALUE CHAIN INTERVENTIONS AND OUTCOMES.....	7
IR 1: INCREASED CROP PRODUCTIVITY	7
Sub-IR 1.1 Increased Use of Improved Farm Management Practices	7
Sub-IR 1.2: Increased Use of High Quality Agricultural Inputs	8
IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS.....	11
Sub-IR 2.1: Improved Market Linkages	11
Sub-IR 2.2: Increased Access to Market Support Services.....	13
Sub-IR 2.3: Improved Post-Harvest Handling	13
3.0 COFFEE: VALUE CHAIN INTERVENTIONS AND OUTCOMES.....	15
IR 1 INCREASED CROP PRODUCTIVITY	15
Sub-IR 1.1 Increased Use of Improved Farm Management Practices	15
Sub-IR 1.2 Increased Use of High Quality Agricultural Inputs	16
Sub-IR 1.3: Increased Access to Production Support Services.....	17
IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS.....	19
Sub-IR 2.1: Improved Market Linkages	19
Sub-IR 2.2: Increased Access to Market Support Services.....	20
Sub-IR 2.3: Improved Post-Harvest Handling	20
4.0 PROGRAM MANAGEMENT.....	22
Behavior Change: Sparking Transformation across the Value Chain	22
Monitoring, Evaluation and Learning	23
Environmental compliance	26
Engagement with U.S. Peace Corps and the Government of Uganda.....	27
Activity administration	28
Promising Innovations.....	30
Collaborating, Learning and Adaptation.....	30
Challenges to Scaling Interventions.....	31

List of Tables

Table 1: Percentage reduction in post-harvest losses	vi
Table 2: Key Achievements- PMP indicators for Year One	vii
Table 3: Participants in the safe use and handling of inputs and environmental compliance trainings	34

List of Figures

Figure 1: Graph showing the Four Step Approach	2
Figure 2: Commodity Production and Marketing Activity Results Framework	3
Figure 3: Areas of operation by value chain and intermediate results	0

Annexes

Annex 1: PMP Indicator Table	36
Annex 2: Quarterly Financial Report	40

LIST OF ACRONYMS

aBi Trust	Agri-Business Initiative Trust
ACE	Area Cooperative Enterprise
BAIDA	Bugiri Agribusiness Institutional Development Agency
B2B	Business to Business
CEDO	Community Enterprise Development Organization
CIAT	International Center for Tropical Agriculture
CLA	Collaboration, Learning and Adaptation
CODE	Community Development Enterprise
CQI	Coffee Quality Institute
CWS	Central Washing Station
DAP	Di-ammonium Phosphates
DOP	District Operational Planning
EAC	East African Community
E-Banking	Electronic Banking
FAQ	Fair Average Quality
FICA	Farm Inputs Care Centre Limited
FTF	Feed the Future
GAP	Good Agronomic Practices
GOU	Government of Uganda
Ha	Hectares
IFPRI	International Food Policy Research Institute
KAIDA	Kamuli Agribusiness Institutional Development Agency
KG	Kilograms
MAAIF	Ministry of Agriculture, Animal Industry and Fisheries
MACE	MANYAKABI Area Cooperative Enterprise
ME&L	Monitoring, Evaluation and Learning
MIS	Management Information System
MT	Metric Ton
NAADS	National Agricultural Advisory Services
NALG	Nakisenhe Adult Literacy Group
NASECO	Nalweyo Seed Company
NARO	National Agricultural Research Organization
PCVs	Peace Corps Volunteers
PHH	Post-Harvest Handling
POs	Producer Organizations
REDS	Rural Enterprise Development Services Ltd
SCAA	Specialty Coffee of America Association
TOH	Taste of Harvest
UAP	UAP Insurance Uganda
UCDA	Uganda Coffee Development Authority
UCF	Uganda Coffee Federation
UDB	Uganda Development Bank
UGACOF	Uganda Coffee Limited
UGX	Uganda Shillings
UNBS	Uganda National Bureau of Standards
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
USD	United States Dollar
VA	Village Agent
VARM	Village Agent Retail Model
VC	Value Chain

KEY ACCOMPLISHMENTS AND LESSONS LEARNED

The USAID/Uganda Feed the Future Commodity Production and Marketing Activity is on track to sustainably increase the production and marketing of high quality maize, beans and coffee in the 34 FTF focus districts.

The Activity, using the facilitative value chain approach and working through partnerships with other Feed the Future (FTF) activities—including Ag-Inputs, Peace corps and Enabling Environment for Agriculture - rolled out interventions to 27 out of 34 FTF districts in year one by engaging middle value chain actors who invested resources and established relationships that incentivized and built capacity of farmers to improve productivity and market access. The middle value chain actors included traders, producer organizations, cooperatives, small-scale processors (e.g. coffee hullers, washing station operators), agro-dealers and warehouse managers. Middle value chain actors were also linked to private sector service providers (exporters, fabricators, banks and crop insurance companies) to more ably deliver additional market services to farmers. Most importantly, the middle value chain (VC) actors undertook these investments because they increasingly saw the commercial and social incentive to do so, and, as a result, they are willing to steadily improve their businesses in a sustainable manner that does not depend on long-term, outside support.

Key Accomplishments in Year One

In year one, the Activity coached and mentored 116 middle value chain actors and 1,248 village agents (VAs) to provide production and marketing services to 109,633 smallholder farmers in order to improve productivity. Through the Activity- promoted input access models, traders and VAs sold improved inputs worth \$981,817 to farmers. The middle value chain actors increased access to genuine inputs such as improved seed varieties and fertilizers (soil based and foliar), and provided proximal (basic) extension services to small holder farmers. As a result, average gross margins increased from \$326 to \$355 per hectare across the three commodities. In addition, through the middle value chain actors, the Activity exposed 55,703 women to different innovations that included bean seed production, input usage and improved farm management practices. Four labor-saving technologies that meet women needs were promoted across the 27 FTF districts, including jab planters, electronic sprayers, seed cleaners and mobile shellers. A total of 933 VAs were trained in spraying services and input product knowledge.

To improve resilience to climate change, middle value chain actors promoted uptake of risk reducing practices, including but not limited to use of early maturing and drought tolerant seed varieties, conservation tillage and mulching to 48,154 smallholder farmers. Environmental compliance messages and practices that mitigate the negative impact of new agricultural practices to the environment while improving farmer incomes, were shared along the value chains.

The Activity leveraged a total of \$2.2 million from middle value chain actors to support smallholder farmers to access production and post-harvest handling services such as grain conditioning equipment, shelling, spraying and storage facilities. This resulted into a reduction in post-harvest losses in beans, maize and coffee as outlined in the Table 1 below.

Table 1: Percentage reduction in post-harvest losses

Beans		Maize		Coffee	
Baseline	Reduction	Baseline	Reduction	Baseline	Reduction
18%	11%	25%	17%	7%	6%

The Activity supported business to business linkages that enabled the formalization of market contracts worth \$15 million between middle actors and buyers which led to the export of 140,761 metric tons of produce. To increase uptake and investment in access to inputs, PHH equipment and improved storage facilities, the Activity linked two cooperatives, one trader, and 23 village agents to access agricultural loans worth \$322,323. In line with the USAID Better than Cash initiative, the

Activity promoted electronic payment services to improve the efficiencies and scope of business-to-farmer and farmer-to-business transactions. Middle value chain actors and smallholder farmers made a total of 6,342 e-payments during the two agricultural marketing seasons. To address climate change and its negative impacts on grain quality, the Activity in collaboration with a local fabricator, designed and tested a two ton mobile dryer prototype to support farmers in efficient drying and to reduce aflatoxin level in grains. The Activity also promoted the use of crop insurance among the middle value chain actors and their associate farmers. As a result, two insurance companies, Jubilee Insurance and UAP Insurance piloted the weather based index to 410 farmers, of which 63 are youth, in two districts. The availability of crop insurance has attracted youth to the agricultural sector due to the promise of more stable income. The Activity linked nine business development services providers to offer coffee grading, maize sample preparation and extension services delivery to two coffee cooperatives, one maize trader and 392 VAs respectively. As a result, 4,462MT of coffee and 2,000MT of maize was exported by these particular entities.

To increase youth involvement in agriculture, the Activity trained 8,852 youth in good agronomic practices (GAPs), farming as a profitable business, safe use and handling of inputs, and machinery use. As a result, a total of 363 youth are gainfully employed in providing planting, spraying and shelling services. A national youth event that attracted 108 youths across the country was organized on behalf of USAID in collaboration with EEA to scale up the momentum gained from such pilots.

Table 2 .Key Achievements- PMP indicators for Year One

S/No	Indicator	LOA Target	Target - FY14	Achievement FY 14	% Achievement
1	Number of Individuals who have received U.S. government supported short-term agricultural sector productivity or food security training	420,000	105,000	116,613	111%
2	Number of farmers and others who have applied new technologies or management practices as a result of U.S. government assistance	290,000	58,000	52,276	90%
3	Number of food security private enterprises (for profit), producer orgs, water user associations, women's groups, trade and business associations, and community-based organizations receiving U.S. government assistance.	27,600	4,300	4,473	104%
4	Number of farmers benefiting directly from Activity interventions	400,000	120,000	109,633	91%
5	Number of hectares under improved technologies or management practices as a result of U.S. government assistance	120,300	20,800	31,050	149%
6	Number of labor-saving technologies that meet women farmers' needs made available for transfer-Output	14	4	4	100%
7	Input sales by activity-assisted intermediary business models	4,010,000	\$ 803,000	\$ 981,817	122%
8	Percentage of farmers acknowledging positive benefits from the accessed inputs	31%	18%	73%	406%
10	Percentage of farmers purchasing inputs from village agents and other promoted models	34%	20%	58%	292%
11	Number of radio, SMS, and other media awareness programs designed to encourage youth to work in value chain businesses implemented	10	2	2	100%
12	Number of youth apprenticeships in value chain businesses brokered by the Activity	115	40	25	63%
13	Number of jobs attributed to FTF implementation	382	146	208	142%
14	Value of Agricultural and Rural Loans	2,890,000	441,000	322,323	73%
15	Number of MSMEs receiving USG assistance to access bank loans	100	25	24	96%
16	Volume of exports by Activity assisted traders and exporters	288,900	109,700	140,761	128%
17	Number of e-payments completed by value chain actors as a result of the activity's promotion of	81,600	8,160	6,342	78%

	USAID's Better than Cash Initiative				
18	Total increase in installed storage capacity	24,000	4,800	4,804	100%
20	Percentage of female participants in U.S. government-assisted programs designed to increase access to productive economic resources	40%	40%	47%	116%
21	Proportion of females who report a change in self-efficacy at the conclusion of U.S. government-supported training/ programming	30%	5%	3.67%	73%
22	Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance	210,000	52,500	48,154	92%

Year One Lessons Learned

The following is an overview of key lessons learned in year one:

- Selecting Partners:** The first task during field implementation was to have staff analyze and share experiences on proven models/approaches, and identify points of entry that drive a process of generating sustainable benefits for smallholder farmers and other actors in the value chain. It also involved identifying key persons in each model (the game changer, the messenger and external partners) and designing the messages that lead to buy-in by the game changer. It was noted that while identification of the right game changer is key to ensure scale-up and sustainability of adopted innovations, the message used to sell the model should also be well designed and must contain all potential benefits to justify partner “buy-in” and investment. More support is required in packaging ideas that are acceptable to Activity partners in addition to ensuring that the boundary partners provide appropriate messengers that can deliver the Activity’s messages to the farmers who are the ultimate target.
- Orienting Staff and Partners on the Facilitation approach:** At the start of year one, in the first quarter, the “buy-in” process was slow as a result of managing middle actor expectations for free things in an environment dominated by multiple donor partners that provide direct financial support or 100% support in terms of goods and services. The Activity’s facilitative value chain approach requires “light touch” investment that should incentivize the middle actors to invest a larger portion of the investment (ratio of 1:4). Selecting clients that are willing to invest with the Activity requires a lot of effort in selling incentives/ benefits that makes business sense for the partners to invest. During the first quarter, staff and partner orientation in the implementation/facilitation approach enabled timely implementation and laid a foundation for rapid scale up. Underscoring the importance of staff and partner orientation and buy in at the beginning of Activity implementation, by end of second quarter the number of clients/middle actors who were willing to invest with the Activity increased tremendously and resulted in formal commitment with partners through MOUs signed.
- Adoption of promoted innovations:** Adoption of promoted innovations varies from innovation to innovation based on different factors. The following were the key factors or challenges that affected the adoption of innovations promoted in the three VCs:
 - 1) Access to capital was sighted as a major constraint to adoption of innovations such as investing in promotional events, building the capacity of VAs, rewarding VAs, and investing in access to market information technology, among others.
 - 2) Lack of equipment and tools was a key factor that impeded adoption of promoted innovations, especially those that involved offering differentiated prices for quality grain.
 - 3) Presence of other Implementing partners who are providing free inputs where engagement with middle value chain partners overlapped with those of the Activity
 - 4) Farmers’ adoption of improved technologies is influenced by the level of initial investment required; the preference is for lower cash outlays.
- Measuring facilitation results:** Counting or documenting impact and the actual smallholder farmers’ reach is difficult using the facilitative approach. Evaluating impact when using a

facilitative approach requires the Activity to observe changes from Activity start and document them as signs of early progress towards achieving goals. Unlike general evaluations that aim to answer many types of questions, impact evaluations are structured around one type of question: What is the impact (or causal effect) of a program on an outcome of interest? To document this early progress, the Activity developed a results chain assessment across the three VCs identifying early progress markers that occur at different stakeholders' level. To document numbers of farmers reached through the "middle actors", the Activity implemented a monitoring, evaluation, and learning (M E&L) system that requires village agents to collect the information. The level of literacy of the VAs was low, so they need rigorous training and follow up to improve their level of data documentation. The Activity conducted various training for these VAs and also selected Lead VAs among them to assist the other VAs in data collection and improve the quality and timeliness of data collection that informed the Activity in real time. This data enabled the management team to make decisions regarding scaling up successful initiatives and redirecting and adjusting resources to effectively achieve goals.

- **Input market systems:** Traders' support farmers in accessing inputs improves relationships between farmers and traders at the initial stage, which enhances farmer confidence in quality of inputs, and increases their demand with the assurance of a ready market. Designing program that facilitates input dealers, VAs or stockists to deliver inputs at home i.e. door to door deliveries of inputs to farmers' homes can improve farmers adoption of improved inputs and the design of financial products (stockiest or Traders and VAs) that enables farmers to save for inputs as soon as they receive their money. Traders' participation in production activities, such as procurement and transportation of inputs and advancing credit to farmers to prepare their land, improves and strengthens trader-village agent relationships and creates local ownership. Regular meetings among traders, VAs and stockists strengthens their business linkages and builds trust, improving business engagements between traders, village agents and production support service providers such as financial institutions and seed companies, which in turn results in self-driven collaboration.
- **Market linkages and market supply systems:** Traders are willing to cooperate when they need to meet market requirements. Incentives for more efficient movement of quality produce through value chains and the promotion of quality standards among actors enhances farmer adoption of improved technologies and practices. The market is the primary determinant of how industry stakeholders respond to Activity interventions, so implementing partners need to be cognizant of the fact that production is bound by seasons and that key actors are often constrained by time and available services.
- **Improving availability of quality seed-**In order to supply the market with preferred varieties of a single color seeds, there is a need for traders to engage with farmers at the point of input procurement and production. This will enable traders to source seed from reliable suppliers, with the support from the Activity to guide farmers, through the associated village agents, to improve production management practices.
- **Timely training schedules-**Coaching of trader partners and their village agents including host farmers on the different technologies for application on the learning sites should happen prior to the delivery of inputs/ seeds before on set of rains. This provides ample time for clarifications and field preparations. After the on-set of rains, farmers tend to get busy with field activities and may not allow sufficient time for training or attending to learning site activities.
- **Bean Staking-**Farmers newly exposed to climbing beans learned that staking is very important for the crop to maximize yield. The size of the sticks used for staking must be big and strong enough to withstand both the weight of beans and strong winds especially when it rains.
- **Strategic Opportunity-**There is a great opportunity to scale up the use of climbing beans, a new crop in the highland areas of the West Nile sub-



region, because agro-ecological conditions in the areas are good for crop production. In addition, good market opportunities exist both in the sub-region and in neighboring South Sudan.

- **Shifting Tactics** -Some improved seed varieties do not necessarily perform well under adverse conditions, even when management is good. For example, Longe 10H is marketed as being drought tolerant, but it failed to perform in some areas where rainfall was insufficient. Traders and VAs should be advised on planting short-maturing varieties even when their productivity is low in areas where short rains are normally expected.
- **Strengthening Relationships** -Where traders were willing to invest in supporting their VAs to provide services to farmers, relationships between VAs, farmers, and traders have improved resulting in positive outcomes for all involved.
- **Cost Effective Techniques** -Farmers are more likely to adopt use of improved farm management practices, such as pruning and timely weeding, which do not require significant upfront cash outlays. Thus, the industry should focus first on promoting practices that require little upfront cash but lead to improved yields and additional income. More costly options, such as application of inorganic fertilizers, can then be promoted as an additional option that is more costly but has higher returns.
- **Long growth cycle** -Coffee like any crop requires a cluster or combinations of interdependent improved practices and technologies to optimally produce the desired results. A single technology such as fertilizer application is important but not sufficient when not supplemented with improved practices such as weed control and pruning. A greater challenge is realized with coffee, a tree crop that has a longer production cycle to show quick and visible results.

The Way Forward: Scaling up interventions across the three value chains in year two

Year one was characterized by creating awareness among actors, learning and adapting. At the end of year one, many actors are preparing to scale up the innovations promoted during year one. Building on the strategic opportunities, challenges, and lessons learned in the first year, the Activity will focus on the following on year two:

- Increasing adoption among pre-contemplators and contemplators by designing strategies to facilitate coping with high risk situations that might trigger relapse among actors and those in the maintenance stages of adoption. Increasing adoption will involve intensification of scale up by raising awareness through avenues such as newspapers, writing and distribution of role model stories, and business to business visits, among others.
- Reviewing early progress markers and adjusting the data collection approach for those progress markers that are not relevant to all models/actors.
- Intensifying individual middle actor contacts for tailored mentorship and coaching by working with individual middle actors to agree on what behaviors they want to change, creating a plan and coaching them on how to execute it, and then reevaluating and modifying the plan as needed. Following workshops and trainings, whenever possible, work with middle VC actors as individuals, not as groups, as individual needs are varied.
- Awareness creation and initiation; coaching middle actors on what they have to lose or gain, building their capacity to carry out the desired change, and encouraging evaluation of current behavior.
- Motivating middle value chain actors through sharing experiences and stimulating enterprise re-evaluation/ reappraisal through business to business visits.
- In line with the development hypothesis, assessing achievement of expected changes at the beneficiary level connected to middle actors to confirm that change at enterprise level results in change at the beneficiary level.
- Building staff capacity in selling benefits of innovations to match growth needs of middle VC actors.
- Scale up the promotion of appropriate foliar fertilizer application in association with improved bean varieties to increase both productivity and marketable surpluses of beans.

- Support the expansion of foundation bean seed production among targeted farmer groups/associations to provide a base for commercial production of single color/variety beans required by the market.
- In collaboration with the Agriculture Inputs Activity (AIA) and associated input suppliers, scale up farmers' access to the striga tolerant maize hybrid seed which has proved effective in overcoming the striga parasitic weed.
- Promoting pruning, including de-suckering, stumping, and cutting off infested and unproductive primary branches as a critical yield enhancing production practice that alone can improve yields by up to 30 percent. As pruning does not require significant upfront cash outlay, it presents an opportunity for easy adoption by the cash trapped small scale coffee farmers that form the bulk of producers.
- Supporting the diversification of services provided by middle value chain actors at learning sites through field days and business to business visits that result in both higher productivity and marketable volumes of good quality from small scale farmers.
- Building on collaboration established with AIA, EEA, the Agribusiness Trust and other organizations such as WFP, UCDA, TGCU, EAGC and others to promote varied areas of mutual concern ranging from climate change, policy to commodity standards.

The important lessons learned during year one implementation and the suggested way forward will set the pace for scaling out interventions in year two. In year two, the Activity intends to target 24 exporters/big buyers/processors, 198 traders linked to 1,650 village agents, seven coffee cooperatives and six producer organizations to reach an additional 170,370 small scale farmers (for a cumulative total of 280,000) to meet market requirements through timely delivery of improved production and marketing services.

Success Story Snapshot: Supporting Farmers Access Production and Marketing Services: A Trader's First Hand Experience

Mr. Simuntu describes the transformation of his maize business as a result of the Activity's coaching and mentoring on production and marketing: "We used to buy whatever farmers brought to us...but the quality would not be so good and the quantity not sufficient to meet the orders by off takers, especially WFP and Kenya markets."

Simuntu and his VAs now provide farmers with market information and quality price differentiation and he plans to scale up efforts. Simuntu addressed the lack of improved inputs adoption and access by investing in 42 learning sites to create demand, promote good agricultural practices, and build farmer trust. As a result, there was significant increase in demand for improved maize varieties-Longe 10H, Longe 7H-IR and fertilizers.



Photo 2: Simuntu (far right) and his VA (far left) is one of the traders partnering with the Activity on improving maize production in Bulambuti District.

INTRODUCTION

Chemonics International Inc. with our local partner, Rural Enterprise Development Services Ltd. (REDS), is pleased to present the first annual report for the USAID-funded Uganda Feed the Future (FTF) Commodity Production and Marketing Activity, hereafter referred to as the “Activity.”

The objective of the Activity is to achieve a sustainable increase in the production and marketing of high quality maize, beans, and coffee in 34 FTF focus districts with a life of activity (LOA) target of reaching 400,000 farmers. The Activity will significantly contribute towards achieving the following USAID Uganda Feed the Future results:

- 50 percent average increase in incomes of target populations
- 100 percent increase in value and volume of exports for maize and coffee
- Increase in exportable maize from 250,000 to 600,000 metric tons
- 50 percent increase in average national bean yields

This will be achieved by: increasing crop productivity, increasing the availability and effectiveness of support services, strengthening inter-actor relationships for more effective movement of produce and information between buyers and sellers, and increasing access to domestic, regional, and international competitive markets.

The Activity uses a facilitative value chain approach aimed at improving relationships among middle value chain actors and farmers to achieve sustainable productivity through promotion of incentives that motivate value chain actors and encourage public-private investment and collaboration on sector competitiveness strategies.

The Activity development hypothesis is based on use of multiple intermediary business models including producer organizations, cooperative societies, traders linked to buyers, small-scale processors such as coffee hullers and washing station operators, agro-dealers, warehouse managers, block farm nucleus centers, and private sector and NGO farm service centers. Other key stakeholders engaged included grain and coffee cooperative unions; the Millers' Association; processor and seed companies; financial institutions; Information and Communication Technology (ICT) service providers (e.g., mobile money); equipment fabricators; traders; village agents and input agents. Multi-stakeholder engagement helped cultivate “buy in” using a facilitative value chain approach.

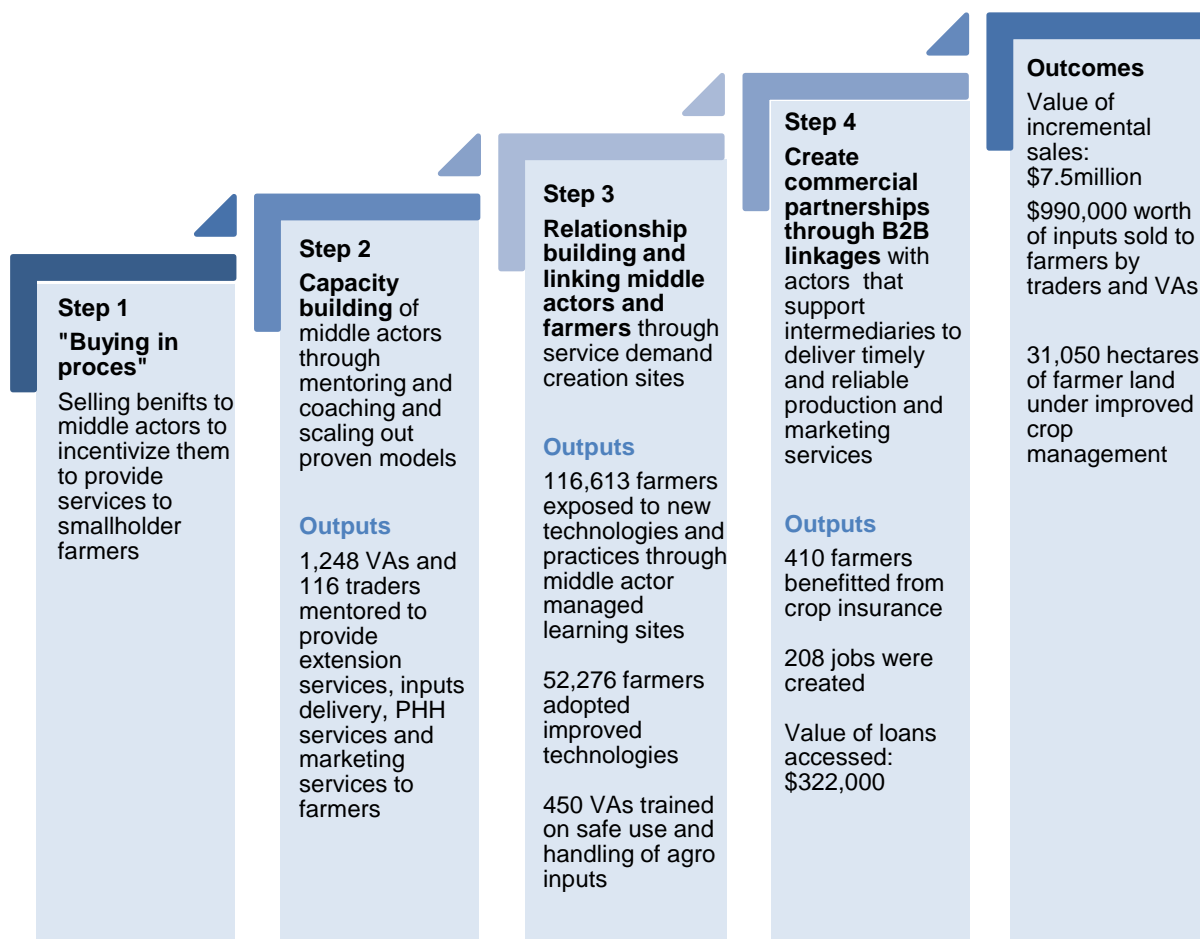
Through energizing win-win partnerships with other Feed the Future activities—especially AIA, and EEA, the Activity engaged private sector entities such as agro input suppliers, exporters and trade institutions to demonstrate to smallholder farmers self-sustaining innovations, extension services, technologies, proven practices and promotion of policies that can effectively increase agricultural growth, improve livelihoods, and thus reduce poverty among smallholder farmers, including women.

The collaboration, learning and adapting (CLA) approach was integrated in all interventions by emphasizing the adoption of promising practices in current and previous USAID Feed the Future activities, successful value chain business practices, and industry knowledge. Knowledge management and communication strategies were rolled out to boost institutional learning among partners.

Overview of the Activity's four step approach

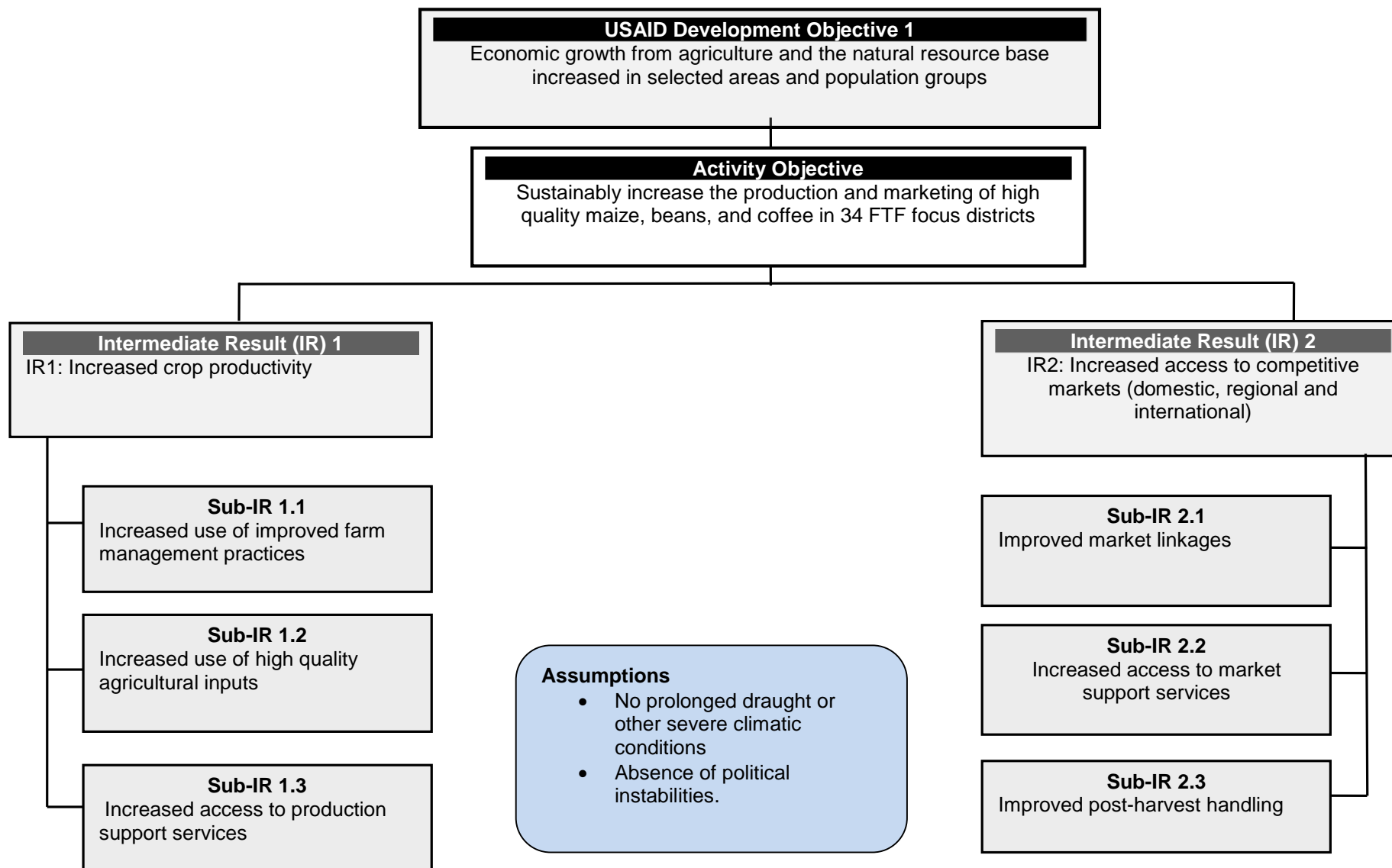
Using a four step approach, the Activity coached and mentored 116 middle value chain actors and 1,248 village agents to provide production and marketing services to 109,633 smallholder farmers, improving productivity as outlined in the graph below.

Figure 1: Graph showing the Four Step Approach



The Activity results framework in Figure 2 below summarizes the implementation approach of the Activity work planning and results monitoring.

Figure 2: Commodity Production and Marketing Activity Results Framework



The map displays the following districts in Uganda: KOBOKO, YUMBE, MOYO, LAMWO, KITGUM, KAABONG, MARACHA, ADJUMANI, ARUA, AMURU, GULU, PADER, AGAGO, KOTIDO, ABIM, MOROTO, ZOMBO, NEBBI, NWOYA, OYAM, KOLE, LIRA, ALEBTONG, OTUKEI, NAPAK, KIRYANDONGO, APAC, DOKOLO, AMURIA, KATAKWI, MASINDI, AMOLATAR, KABERAMAIDISO, KAKW, NAKAPIRIPIT, AMUDAT, HOIMA, SERERE, NGORA, KUMI, BULAMUL, KWEEN, BUKEDAKA, TOROK, BUKWO, NAKASEKE, KYANKWANZI, KIBOGA, KAYUNGA, KAMULI, KALIRO, KIBUKU, BUDAKA, MRALE, BUDUDA, TORORO, MANAFWA, KIBALE, KYEGEGWA, MUBENDE, MITYANA, LUWEERO, KAMPALA, BUKOMANSIMBA, KALUNGU, SEMBABULE, GOMBA, BUTAMBALA, WAKISO, MPIGI, KIRUHURU, YANTONDE, KASERE, KAMWENGE, IBANDA, RUBIRIRI, BUHWEJU, BUSHENYI, MTOOMA, SHEEMA, MBARARA, RUKUNGIRI, KANUNGU, NTUNGAMO, ISINGIRO, RAKAI, MASAKA, KALANGALA, BUVUMA, NAMAYIRGO, and KISORO, KABALE.

Legend:

- District Boundary
- Open Water
- Beans
- Maize
- Coffee

Scale: 1:3,300,000

Scale Bar: 0, 25, 50, 100, 150, 200 Kilometers

1.0 MAIZE: VALUE CHAIN INTERVENTIONS AND OUTCOMES

The Activity supported the industry to increase investment in smallholder farmers through coaching and mentoring of middle value chain actors to equip farmers with skills, increasing farmer access to quality inputs, market information, and providing linkages to agri-financing.

As a result, middle value chain actors were able to buy increased volumes of maize crop at quality differentiated prices through improvements in maize quality and productivity at the smallholder level and at the primary aggregation level of village agents. This increased incomes for both smallholder farmers and middle value chain actors.



Achievements and Outcomes



Photo 3: Farmers in Nakigo sub-county, Iganga District adopting the use of quality inputs and GAPs.

Maize value chain snapshot

54,531 farmers benefitted from Activity interventions

24,163 hectares of maize planted by small holder farmers under improved practices

23,528 metric tons of EAC Grade 2 maize sold

\$532,647 worth of seed, fertilizer and agro-chemicals sold to farmers by traders and VAs

1,303 youth trained on good agronomic practices resulting in employment of 70 youth while 42 started post-harvest processing enterprises

IR 1: INCREASED CROP PRODUCTIVITY

Sub-IR 1.1 Increased Use of Farm Management Practices

Middle value chain actors' private sector investment support

More than two thousand learning sites (2,741) managed by 60 middle value chain actors (9 ACEs, 8 farmer organizations and 43 traders) and their 696 village agents were established during year one. The sites provided a platform through which 54,531 small holder farmers were exposed to improved farming practices. The provision of extension and other production services by middle value chain actors reflected a significant buy in into Activity-promoted innovations that included establishing learning sites as an inputs demand creation strategy.

Twezimbe ACE in Kiboga obtained a loan of UGX 359,251,700 from UDB to support 363 farmers to procure 16,000 kilograms of fertilizer, 3,700 liters of herbicide and 7,130 kilograms of quality hybrid seed



Photo 4: A demonstration of improved maize farming practices in Mbulamuti, Kamuli district.

The Activity partnered with NASECO seed and 60 maize traders to demonstrate and commercialize a maize variety 7H-IR coated with an herbicide that controls the *striga* weed, which is responsible for a significant reduction in maize production. Awareness created about this improved maize variety kick-started its adoption in Eastern, Western and Northern Uganda.

The Activity coached 1,303 youth trained on good agronomic practices including correct use of agro-inputs, resulting in employment of 70 youth, while 42 started post-harvest processing enterprises.

Sub-IR 1.2 Increased Use of High Quality Agricultural Inputs

Adoption of good quality inputs

The and 696 product

delivery, where the was traders worth including FICA Organic



More than exposed variety through 65 small scale mid- season field days at 274 fields in 6 districts, which resulted in an maize Eastern, The seed

Photo 5: Farmers comparing cobs from a striga infested field with the striga tolerant Longe 7HIR (big cob) in Bugiri District.

Activity coached sixty traders VAs linked to 54,531 farmers in demand and supply chain management in agro-inputs utilizing the 2,741 learning sites efficacy of various technologies demonstrated. As a result, 13 bought improved seed varieties \$265,000 from six companies NASECO Seeds, Pearl Seeds, Seeds, Export Trading Group, Bio-deposit Uganda and Hangzhou.

7,557 farmers were additionally to the *striga*- tolerant maize

while six traders and 23 VAs from Jinja, Iganga, Kamuli, Bugiri, Tororo and Namutumba districts were trained on planting and handling the seed. As a result, of linkages to suppliers of agri-inputs, 24,163 ha of land were planted with improved maize varieties promoted during the year.

Mentoring traders to implement incentive mechanisms to reward VAs

Overall, about \$532,647 worth of inputs were sold to farmers by traders/ VAs and input stockists engaged by the Activity during year one. For example, Rama, an inputs dealer in Mbale district and Kambuzi in Iganga district, started offering incentives ranging from UGX 200 - 500 to VAs for each kilogram of maize seed sold, prompting VAs to reach even more farmers with a “door to door” mode of agro-inputs delivery.

Sub-IR 1.3 Increased Access to Production Support Services

Clients facilitated to access financial support

The Activity coached and mentored targeted intermediaries in financial and business planning to support them to gain access to financial assistance from banks and microfinance institutions (MFIs) to improve or expand their services. As a result, 363 farmers under Twezimbe ACE in Kiboga district accessed a loan of up to \$136,516 from Uganda Development Bank and procured: 16,000 kg of DAP fertilizer; 3,700 L of Glyphosate herbicide; and 7,130 kg of quality hybrid seed. The bank also finalized loans worth \$608,365 to benefit 3,277 farmers under RUKODE, Bweyale and BAIDA farmers associations in the 2015A season. The targeted farmer beneficiaries were trained by UDB officials on loan and credit management. Joseph Initiative also received documentation support to access an equity loan of \$1.3 million from DOB Equity Company based in Netherlands.

Twezimbe ACE members were mentored on crop insurance by UAP and Jubilee Insurance Company to guide farmers in understanding how best to work with insurance companies for prompt compensation. Twezimbe ACE was able to acquire a production loan of UGX359, 251,700 from UDB to cover 363 farmers. The loan was covered by Jubilee Insurance Company at an insurance premium rate of 5.5% per season pegged at a yield guarantee of 70% and a set price of UGX500 per kilogram. The Activity also mentored four traders and three Area Cooperative Enterprises (Bunambutye, Bukusu, and Kaserem) from Sironko, Mbale and Kapchorwa districts to incorporate a savings and credit component to enhance operations for their members.

Increasing trader/VAs capacity to provide production support services

696 VAs were coached on business opportunities in the provision of production services. Some services which these intermediaries provided to farmers included pesticide/herbicide spraying, extension support, and planting services. As a result, 208 jobs were created for youth, engaged to provide services, particularly covering spraying and planting services.



Photo 6: Group photo of some of the youth that attended the USAID National Youth Event at Colline Hotel Mukono.

On behalf of USAID, the Activity, in partnership with Enabling Environment for Agriculture Activity, organized a youth event to promote youth involvement in agriculture. It showcased youth role models and other successful agribusinesses. The event involved motivational talks and field visits to various sites including a

research center, input dealers, agro-processors, machinery fabricators and suppliers, small and large scale farms. These sites showcased opportunities for youth involvement in agribusiness. 125 youth drawn from the four regions of the country participated.

Benchmarks: IR 1 Maize Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
450 VAs coached on use of labor-saving techniques by September 2014	696 VAs coached on use of labor saving technologies
At least 500 demonstration plots established by March 2014	2,741 learning sites established
Entrepreneur skills of at least 450 VAs built by September 2014	696 VAs entrepreneur skills enhanced in provision of production and PHH services
At least 1,000 VAs trained on safe use of agro inputs by April 2014	419 VAs received training on the safe use of agro inputs
NASECO Seed improved seed variety with <i>striga</i> -resistant chemical launched in at least 5 districts by September 2014	NASECO Seed, tolerant to <i>striga</i> weed launched in 8 districts.
At least 450 VAs providing extra services to farmers by September 2014	696 VAs providing extension and other extra production services to farmers.
At least 10 enterprises linked to a financial institution by September 2014	28 enterprises linked to financial institutions
At least 15 processors/exporters accessing equity finances as a result of Activity linkages by September 2014.	1 processors/exporters accessing equity finance as a result of Activity linkage
200 village agents using e-payments for input purchase by September 2014	63 village agents using e-payments

IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS

Sub-IR 2.1 Improved Market Linkages

New markets accessed

Through a cost-share arrangement, the Activity supported 57 maize traders from the eastern and central regions to attend four business-to-business meetings held in Jinja at Upland Rice Millers to foster business collaboration. As a result, Twezimbe ACE signed maize grain supply contracts with three Activity partners, Upland Rice Millers, Cereal World and Investment Group, guaranteeing them a supply of good quality maize. Other business-to-business meetings were conducted at the Joseph Initiative premises in Masindi district for DII Cwinyi Store and Bweyale ACE from Kiryandongo district.

Through linkage meetings, the Activity fostered improved collaboration between traders in an effort to meet market demands. CODE in Kasese district accessed milling services from Tonga Investments in Mityana to meet an order from Uganda Breweries for 600 metric tons of Grade 1 maize, resulting in greater incomes for all actors in the middle value chain, Joseph Initiative sold 884 metric tons of EAC Grade 2 maize in Kenya

while DII Cwinyi and Bweyale ACE sold 16 MT of grain to Joseph Initiative. In total, 23,528 MT of maize grain were traded by middle value chain actors in the four regions of the country as a result of the several linkages developed.

Collaboration with strategic partners to sensitize and scale up best practices among traders/stakeholders to meet quality standards



Photo 7: Youth involved in maize shelling services in Kasese district.

The Activity, in collaboration with the Enabling Environment for Agriculture Activity and other stakeholders, also started the process of developing East Africa Standards dissemination materials. Five sensitization events were facilitated to coach traders, businesses and VAs on EAC maize quality standards to enhance their competitiveness on the market. As a result, Tom Etuku and David Gobi, grain traders in Lira town reported average daily procurement volumes of East African Grade 2 grain, of 20MT and 11MT during the July-September 2014 marketing season from 8MT and 6MT respectively. This was a result of coaching and mentoring of their VAs by the Activity in requirements for quality conscious grain markets.

A multi-stakeholder meeting involving the Activity, district officials (the District Commercial Officer and District Production Officer), and traders was held to address the

issue of grain quality in Kiryandongo district. The Kiryandongo district Local Government drafted a bylaw to penalize traders within, as well as those from outside the district, who buy grain irrespective of the quality. The proposed bylaw is still under consideration by the district council which is the final authority, to pass it before enforcement.

Sub-IR 2.2 Increased Access to Market Support Services

Linking market information service providers to traders

Five traders in Western Uganda, Manyakabi ACE, CODE, Kigarama Cooperative Society, Kamwenge Community Development Project, Kakinga Millers, and Joseph Initiative from Masindi in mid-western Uganda, were linked to Farmgain Africa and utilized the information to improve their access to new markets and make informed decisions about their maize trade. They reported a total increase in traded volumes of over 2,500 MT as a result.

The Activity mentored traders and VAs on the effectiveness of making payments using mobile phones. The village agents found it to be safer than carrying cash and as a result, 63 village agents are using e-payments to either purchase inputs or to pay for produce from farmers.

Sub-IR 2.3 Improved Post-Harvest Handling

Supporting traders to train VAs on use of better post-harvest handling techniques



cleaned and graded to 2,219 MT in the after installation from a total of 1,771MT the previous season.

The Activity partnered with 44 traders and 462 VAs training them on improved post-harvest handling, pre-harvest preparations, proper drying of maize grain, shelling, threshing, cleaning and storage. In collaboration with the Field of Hope Ministries, the Activity supported 29 village agents to participate in training on quality standards in Lira.

Joseph Initiative, through a cost sharing agreement with the Activity, received cleaning and bagging equipment worth \$140,344 which supported the completion of an integrated drying, cleaning, grading and bagging grain handling system installed by the company. The system has enabled Joseph Initiative to increase their grain handling capacity and provide farmers with better storage and processing services. It was able to increase output of East African Grade 2 maize grain

Photo 8 Improved Maize Crib promoted with Maize farmers and traders in Kapeeka, Luwero district at under Glad Farms.

one season realized in

John's sheller generates new income streams

"I want to link other village agents to get shellers especially when it is peak season. There is a lot of maize and they can benefit". – John Nsemex, Village Agent, Kamwenge Community Development.

Village Agent, John Nsemex, had always wanted to expand his maize business but he had lacked the financial resources to purchase the machinery he needed. He was finally able to buy a sheller worth \$304 in 2013 with support from the Activity. His business has since expanded as John is now able to shell an average of 30 metric tons weekly at \$0.95 per 100 kilogram bag. John's maize shelling business now includes six traveling agents who operate in six parishes. In addition to creating jobs for others, John is also encouraging his fellow village agents in other locations to buy shellers.

Benchmarks: IR 2 Maize Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
At least 4 events on sensitization of EAC maize quality standards conducted by September 2014	5 events provided a platform for sensitization of EAC maize quality standards.
At least 2 schemes with financial products and services developed by September 2014	1 Solidarity group loan scheme developed.
At least 2 enterprises facilitated to access promoted post-harvest handling equipment by September 2014	19 enterprises facilitated to access mobile shelling equipment
At least 50 youth using post-harvest equipment to generate income by September 2014	64 youths using post-harvest equipment to generate income.
At least 10 businesses assisted to develop business plans to increase access to loans by September 2014	5 businesses assisted to develop business plans

2.0 BEANS: VALUE CHAIN INTERVENTIONS AND OUTCOMES

During year one, more than 26,486 bean small holder farmers were empowered to increase both the quality and quantity of their produce. Basing on a “seed to market” approach, the Activity coached private sector intermediaries to equip farmers to produce more marketable and profitable grain.

Achievements and Outcomes



Photo 9: Winnie a VA of Tonga Investments proudly shows the climbing beans' pods (NABE 12C).



Beans value chain snapshot

26,486 farmers were reached through 1,318 beans learning sites with 51 percent of the sites hosted by women

4,288 hectares of beans planted by small holder farmers under improved practices

\$193,435 worth of seeds, agrochemicals and fertilizers sold to farmers by VAs

Traders independently established 43 new sites on 22 acres indicating increased buy-in

IR 1: INCREASED CROP PRODUCTIVITY

Sub-IR 1.1 Increased Use of Improved Farm Management Practices

New improved bean varieties including NABE 15, NABE 1 and NABE 17 were introduced to

Facilitating “Middle Value Chain Actors” to empower farmers with good bean farming practices

To enable farmers to boost their yield quality and volume, the Activity coached 99 traders and 581 Village Agents on how to effectively engage farmers in learning and adapting proper spacing, disease and pest control, timely weeding, post-harvest handling and planting single type-improved bean varieties for a more marketable product.

The
and
26,486
learning
the
8,556
services

Utilizing
some
sites,
Kiyuni
Sanyu
invested
sites

acres. This investment reflected an increased level traders’ buy-in to support farmers in improving produce quality.



Photo 10: Women Farmers in Mityana at one of the NABE 5 beans farm.

traders and Village Agents established managed 1,318 learning sites reaching farmers. More than 50% (676) of the sites were established by women. Through learning sites the VAs were able to expose new farmers to improved bean production technologies, supported by extension and communication materials.

seed generated from the learning sites, traders independently established new including ZAABTA in Luwero district. United Farmers Company in Kiboga and Investment in Mubende. These traders in new seed and established 43 learning under their VAs, covering a total of 22

Targeting 35 traders and 194 VAs, the Activity partnered with UNDP and NARO to produce and distribute leaflets and posters that created awareness about single variety production and handling to increase produce competitiveness.

Increasing bean yields through utilization of improved seed varieties

The Activity increased access and utilization of improved seed varieties for more productivity by connecting middle actors to seed companies such as Grow More Seeds. The Activity coached five traders and 18 VAs on seed production techniques for the cultivation of the climbing beans variety NABE 12C. This variety gained popularity because of its high yield and attracted many small scale farmers especially those around Tonga Investment learning sites in the Kisaana, Busimbi and Dundu villages in Mityana district. A similar trend was observed in Zirowwe, Kapchorwa, Mbale, Sironko, Lira, Gulu, Oyam and Zombo districts. NABE 15, NABE 1 and NABE 17 which are drought, disease tolerant and early maturing were introduced to farmers in Central, Northern, Eastern and Western Uganda as a way of mitigating climatic change effects on beans production.

Farmers benefitting from knowledge and skills transfer activities conducted by traders

The Activity identified 24 female traders and women’s groups and supported them to establish 68 women-led beans learning sites. Eastern Beans Producers in Sironko district, a women’s group headed by Susan Namabirow under KAIDA in Kamuli district, Bukinda Women’s Group in Kabale district, Kamwenge Tukorere Hamwe, under Community Enterprise Development Organization in Kamwenge district, Bala Women Group in Kole district and Hunger Alert in Gulu district also established similar sites. Learning sites continued to serve as a platform for exposing women farmers to quality inputs, safe use of inputs and labor saving technologies.

Sub-IR 1.2: Increased Use of High Quality Agricultural Inputs

Investment in quality seed varieties and fertilizers boosts bean harvests

Due to appropriate use of foliar fertilizers such as Bio-deposit and Green Sea, bean harvests improved. In Bukusu- Manafwa district for example, the average number of pods observed on the climbing beans variety NABE 12C, in fields established by VA-supported farmers, was 60, as opposed to an average of 44 pods from research settings.

Almost 6,764 farmers were exposed to the use of various improved seed varieties and foliar fertilizers in Sironko, Kapchorwa, Lira, Kole, Bugiri, Jinja, Oyam, Kamwenge, Kabale, Kasese and Isingiro districts. In Zirobwe, 480 households out of an estimated 4,700 that make up the sub-county are using good practices and planted improved bean seed obtained from the previous season.

Kisoro Emporium and Bukinda Women's Group in Kabale district were coached to identify ten suitable women groups to be trained on quality bean production in order to scale up the groups output and competitiveness

to a more
valued value
middle value
actors used
active sales
ies such as
omotion of
able small
d packs(1-
VAs their
d farmers,
ontributed
se of NABE
12C.

anga Area
operative
accessed a
ion loan of
from UDB
urchase 6
ns of bean
seed worth
000, hire a
at \$48 per
support 50
nbers, and
fertilizers
amount of
As a result
investment,
realized a
rvest of 80
ns of bean
seed worth
\$96,000.

re gaining
employment
rough the
improved extension
services e.g.
electronic spraying
of crops

Awach Ango Immaculate, is one of the members of the Berbo Women's Group in Agure village, Zombo Town Council, Zombo District. In her garden she planted a new beans variety Nabe 12C after being trained by a Village Agent. Berbo Women's Group was approached to pilot the variety in Zombo District with support from the district production officers.

The Activity builds the capacity of middle actors such as Awach's Village Agent to transfer innovative and effective farming methods and knowledge to the farmers they transact with. When farmers learn of new technologies they begin to demand high quality inputs resulting in better quality crops and higher earnings across the value chain.

Linking Middle Value Chain Actors to reliable quality seed and input suppliers

115 Village agents were connected to bean seed retail traders leading to a purchase of 6.2 metric tons worth \$10,400 of improved bean seed varieties (NABE 15, NABE 12C, NABE 4 and NABE 17) which they supplied to farmers for improved crop productivity.

In the eastern region, the Activity facilitated transactions worth \$12,800 of over 8 MT bean seeds, between five trade partners and six input dealers/stockists. 1,600 farmers directly procured beans from these traders and VAs. The Activity collaborated with Ag-Inputs to connect the traders to their network of input dealers and stockists.

In the western region, the Activity coached seed producers to improve seed production and strengthen linkages to seed suppliers. Kamwenge Tukorere Hamwe Group in Kamwenge district was trained on improved bean seed production to improve their niche in seed production. They were linked to NASECO to supply NABE 15, NABE 4 and K132 bean seed. Kisoro Emporium and Bukinda Women's Group in Kabale district were coached to identify ten suitable women groups to be trained on quality bean production in order to scale up the groups output and competitiveness in 2014B season.



Photo 11: NABE 12C (right) and NABE 5 demonstrations in Manafa district.

Sub-IR 1.3: Increased Access to Production Support Services

Facilitating access to financing and insurance to scale up farmer production

The Activity mentored Kyazanga Area Cooperative Society to develop a business plan and linked them to UDB, through which they obtained a production loan of \$80,000. With this loan, the cooperative purchased six metric tons of bean seed worth \$12,000, hired a tractor at \$48 per acre to support 50 members, and procured fertilizers in the amount of \$9,600. As a result of this investment, they realized a total harvest of 80 metric tons of bean seed worth \$96,000. The Activity, in collaboration with UAP, also trained 16 members with the Kyazanga Area Cooperative Society in crop insurance to protect themselves against either the loss of their crops due to natural disasters, such as hail, drought, and floods, or the loss of revenue due to declines in the prices of agricultural commodities.

Five new enterprises, including Bukusu ACE in Manafa district, Bunambutye ACE in Sironko district, BAIDA in Bugiri district, RUCODE in Kamuli district and Dokolo ACE in Dokolo district, were linked to UDB and commenced on the process of evaluation for financing in the 2015 A production season. The Activity also linked three new enterprises, Peak Value Industries Ltd in Mukono district, CODE-Conservation and Development Uganda in Kasese district and REWA Grains in Mukono district, to Pearl capital partner for possible equity finance.

To improve information flow between middle actors and farmers, the Activity linked Joseph Initiative to agro input dealers, who enabled the firm to conduct input promotional events, such as farmer field days, at their bulking centers. Participating agro-input dealers included NASECO, FICA seeds, Balton, Evergreen, Bayer EA, Hanzhou and Crop Care Center. These events provided an opportunity for input suppliers to network with and receive feedback on inputs from VAs and farmers.

Improved extension services through Village Agents



Photo 12: A Balton representative (center) explains the performance of a Knapsack sprayer to farmers during a field day in Iganga District.

The Activity cost-shared with six VAs from Kisoro, Bushenyi and Isingiro districts to purchase electronic spraying pumps. The VAs hired youth to provide spraying services for which they charged \$4.6 –\$ 5.7 to cover an acre. Farmers saved time and were assured of using both the correct fertilizer and dosage. Using a manual spray pump takes up to 4 hours per acre while using an electronic pump requires only 45 minutes, with the advantage of even spraying across the farm.

Benchmarks: IR 1 Beans Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
------------	--------------

At least 14 traders trained on knowledge and skills transfer methods by December 2013.	A total of 99 traders trained on basic knowledge and skills transfers
At least 150 village agents trained on farm management practices by September 2014.	A total of 581 village agents trained on improved farm management practices
At least 1,005 learning sites established by September 2014.	1,318 beans learning sites established of which 676 learning sites are hosted by women
At least 10,000 women exposed to improved bean technologies by September 2014.	A total of 8556 women farmers of 42,392 bean farmers exposed to improved technologies
At least 50 women community based seed producers linked to seed companies by September 2014.	26 women-led seed producers linked to 5 seed companies
At least 50 village agents involved in input retail by September 2014	115 village agents involved in bean seed retail.
At least 50 youths providing production services to farmers by September 2014.	40 youth provided planting and spraying services
At least 30,000 farmers trained on available production support services by September 2014.	35,566 farmers sensitized through the various VA meetings and trainings organized.
At least 2500 farmers accessing weather index insurance by September 2014	172 received multi-peril crop insurance – under UAP insurance. Discussions are ongoing between insurance firms and interested companies- Jubilee, UAP insurance to engage more farmers.

IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS

Sub-IR 2.1: Improved Market Linkages

Guaranteed markets for beans have the potential to drive the industry forward as it is expected to provide backward flow of industry market requirements through traders and VAs. More than 99 traders worked with the VAs in output trading, production support services, training farmers on good agronomic practices and post-harvest handling. Under the mentorship of the Activity, Flourish Export Company was able to export 800 metric tons of high quality beans (NABE 11, K132 and NABE4) worth \$96,000 to India.

New markets access

The Activity, in collaboration with Kilimo Trust, supported the development of Kitumbi Area Cooperative in Bukuya, Mubende district into an active ACE with business skills training. Areas of emphasis included building a saving culture and collective marketing of beans. Five middle actors, CODE, CEDO, Bukusu ACE, Kyazanga ACE, Kamwenge Tukorehamwe and other traders were linked to exporters, Capital Reef and Grow More Seed. As a result, Grow More Seed was able to export 585 MT to the Middle East while Capital Reef exported 1,500MT of bean grain to the Asian market.

The Activity supported CEDO Seed Company based in Rakai district through 50 learning sites and linked it the markets of Grow More Seed, Pearl Seed and traders in Mubende and Mityana districts. The company was able to bulk 88 metric tons of bean seed, worth \$123,200, sold during the 2014 B season. The Activity also supported CEDO to exhibit their products and transfer knowledge to over 1,000 participants at the four day Lwengo District Economic Summit, where the Guest of Honor was President of the Republic of Uganda. The summit increased the visibility of CEDO, leading to several new business inquiries including Lwengo Business Development Council purchasing 5MT of bean seed for its farmers groups, Malongo farmers group buying 100 kg of NABE 12C.

Increasing access to new competitive markets

To strengthen the bean supply chain the Activity established partnerships with Capital Reef and Grow More Seed who were interested in accessing better quality, single color beans in substantial volumes. Through traders and VAs the Activity facilitated the establishment of seed multiplication units to improve the supply of single color beans grain. These linkages resulted in the following:

- Capital Reef signed a contract to, over the next two years; buy 2000 metric tons of NABE 5 variety from COMQUEST, an Activity trader partner based in Kampala.
- Capital Reef, Grow More Seeds and CODE were also linked by the Activity to obtain 150 metric tons of NABE 4 and NABE 5 from credible traders.

The Activity facilitated the formation of 8 business to business linkages to promote the production of quality exportable bean varieties (NABE 5, NABE 4 and NABE 12C). These include: CODE-Capital Reef, CODE-Grow More Seed, Kyazanga ACE-NARO, CODE-Kilimo Trust, Bunambutye ACE-Kilimo Trust, Mutufu Integrated Traders-Kilimo Trust, CEDO-Farmer Groups and COMQUEST-Capital Reef.

The Activity collaborated with Kilimo Trust to support Bunambutye Area Cooperative, Eastern Beans, and Mutufu Integrated Farmers Association in Sironko district in accessing off-takers such as Busia produce buyers. Kiteredde Investments was as a result able to buy 200 MT of bean grain worth USD 88,000 of from its members.

Under the mentorship of the Activity, Flourish Export Company was able to export 800 metric tons of high quality beans (NABE 11, K132 and NABE4) compared to 100 metric tons sold in the previous season.

As part of the Activity's effort to expand markets for beans including value added products, we partnered with Food and Nutrition Solutions Ltd (FONUS). They were awarded a sub-contract to develop pre-cooked bean products and conduct a feasibility study of the products in the country. A protocol for precooked beans was approved in August 2014. A Sub-contractor is in the process of developing several pre-cooked bean products and is conducting the study expected to be completed in November 2014. The products will target middle to upper income earners.

Sub-IR 2.2: Increased Access to Market Support Services

Promoting E-payments

The Activity promoted the use of digital money transactions to reduce the costs and risks of cash transactions as well as strengthen relationships among value chain actors. 10 traders and 150 village agents including Kamwenge Tukorere Hamwe Group of Kamwenge, Katerera ACE of Bushenyi and Green Farm Africa of Kabale made e-payments worth \$9,000 in year one.

Increasing access to market information

By subscribing to this weekly market information service provider –FARMGAIN AFRICA, the Activity enabled traders and VAs to receive updated price information on national, regional and international market opportunities. The buyers were enabled to make profitable decisions based on the most competitive prices per bean variety.

Farmers realized the value of paying for market information from VAs with smart phones.

- CODE Uganda reached 10,400 farmers in Kasese and Isingiro districts, with market prices for various commodities.
- 22 traders and 120 VAs accessed market information through text messaging
- 5,268 farmers in Mubende, Kiboga, Masaka, Lwengo, Rakai, and Lyatonde, Sembabule districts were reached directly with the up to date agricultural market information
- 26,486 bean farmers have access to market information, through village agents and traders.
- CEDO reached a mass audience of farmers in the Masaka/Mpigi district areas through a Harvest Plus funded weekly radio program. This information was used by traders and VAs to make informed decisions about when to buy beans from farmers and how to track market trends.

Sub-IR 2.3: Improved Post-Harvest Handling

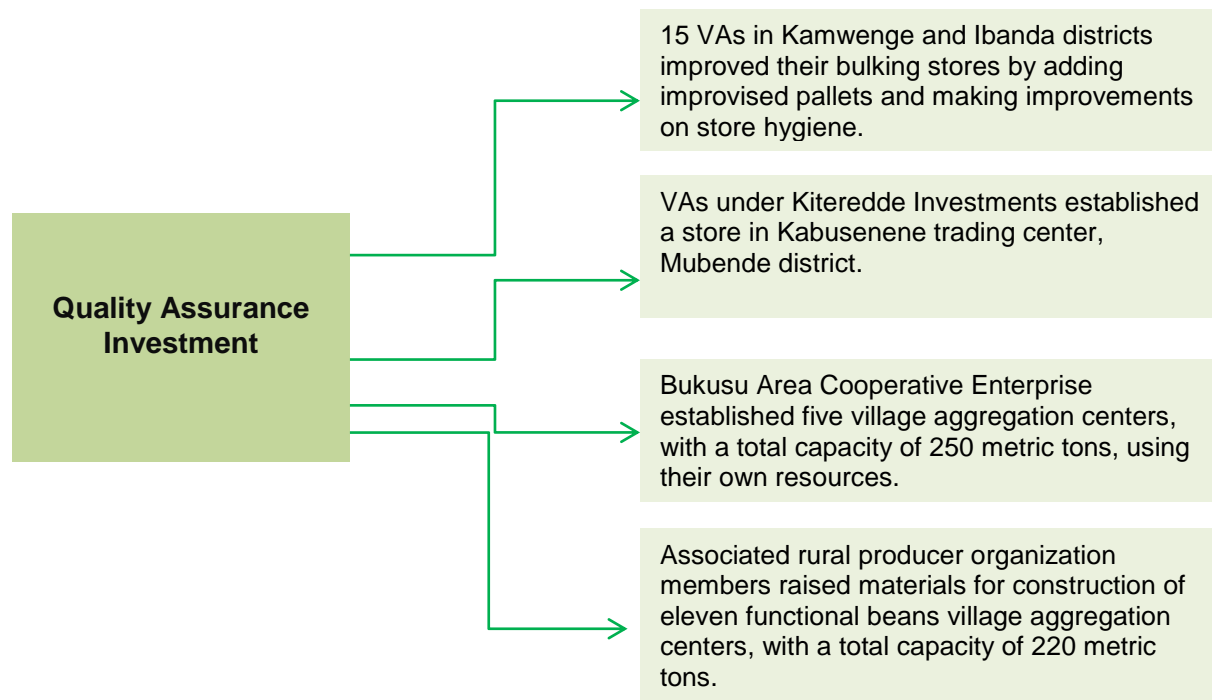
Approximately 2,029 MT worth \$1.2 million of single color was sold as grain by selected traders and VAs to exporters/buyers. Other traders involved in seed production sold 265.3 MT worth \$371, 420 of bean seed to seed companies, NGO, farmer groups/association and individual farmers. Traders and VAs were trained on post-harvest handling both for grain and seed. The value addition in handling single color beans enabled them to access good markets. The East African standard entails that 14 parameters be attended to if bean seed or grain is to qualify for any international market. The biggest challenge is with sorting to ensure single color and or variety, other attributes notwithstanding.

The Activity coached traders and Village Agents in bulking and grain conditioning to meet market quality standards.



Photo 13: Kyazanga ACE women farmers sorting beans for single color market.

Chart showing traders' investments in quality assurance



Benchmarks: IR 2 Beans Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
At least 300 VAs provide input/output services to farmers by September 2014.	133 VAs involved in output marketing
At least 10,000 women farmers have access to market information by September 2014	26,486 women bean farmers have access to market information, through village agents and traders
At least 15 bean traders access market and financial support by September 2014	22 traders accessing market information and 82 trader access
At least 100 VAs with improved aggregation centers by September 2014	A total of 35 VAs with improved storage and aggregation centers
At least 200 traders and village agents involved in the use of e-payments among smallholder farmers by September 2014	10 traders and 150 village agents using e-payments

3.0 COFFEE: VALUE CHAIN INTERVENTIONS AND OUTCOMES



Activity aimed to increase coffee farmer productivity kg per hectare to at least 1.4 tons per hectare by 2018. improvement was realized of 15.6% to an average of

The Activity has engaged with middle value chain actors productivity through better farm management practices initiatives supported to increase access to more and higher prices through improved post-harvest handling (PHH) and transformed market linkages between coffee producers, traders, processors, and exporters.

Achievements and Outcomes

IR 1 INCREASED CROP PRODUCTIVITY Sub-IR 1.1 Increased Use of Improved Farm Management Practices

In collaboration with input suppliers, the Activity mentored 52 middle actors and 522 Village Agents (VAs) and helped set up 702 learning sites demonstrating recommended practices including pruning, stumping, application of fertilizers (foliar and



During the first year of implementation, the Activity committed resources to enable value chain actors to

address factors that stimulate growth in production and export. The Activity also built on the success of previous USAID implementing partners such as LEAD to scale up and out proven technologies and models. Overall, the from its current 750 During the year, an 867 kg per hectare.

to enhance and a number of competitive markets

in snapshot

mers were exposed to ment practices through s established by traders

posed to Perfect Blend

ing with middle value rocure 500 pruning saws s promoting the ractice of pruning

o coffee traders and trained ice

granules), and tree planting. 26,107 farmers were exposed to these learning sites to improve their coffee

Trained9 Host farmers (1 male, 8 female) in collecting data from the Perfect Blend efficacy trial sites.

As a result of the new business linkages between traders and inputs suppliers, Nyongyera Medrine an agro inputs dealer supplied 500 tarpaulins worth \$9,500 to five Ankole Coffee Producers Cooperative Societies that included: Katenga (100) Rwebijunjure (150) Kigarama (100) and Kajunju (150), enabling them to improve the quality of their output

Kibinge Farmers' Cooperative Society ordered two motorized knapsacks worth UGX 400,000 for 8 youth groups to rent and provide spraying services to farmers.

Photo 14: A VA in Kalisizo demonstrating to farmers how to care for their coffee trees.

yields through improved practices.

Collaborating with strategic partners to meet market demand

In order to respond to the global demand for organic coffee, the Activity supported the process of the commercialization of Perfect Blend as a standardized organic fertilizer in Uganda. The Activity facilitated a local input supplier, Keith Associates, with importation of the US based Perfect Blend Fertilizer (PB) and supported the process of registration for use in country by the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) through the National Agricultural Research Organization (NARO). Through a similar arrangement, the Activity facilitated Keith Associates to popularize to smallholder coffee farmers the PB fertilizers through middle value chain actors, NARO, Local Government and farmer owned fields at 9 sites (1 female owned, 8 male owned) in all the four regions of Uganda (3 east, 2 north, 2 central, 2 west) where the host farmers received training in data collection from the trial sites.

**Sub-IR 1.2
Increased
Use of
High
Quality
Agricultural
Inputs**

**Support
platforms
for
information
sharing
and
business
networking
on quality
input
usage**



Photo 15: A coffee plantation with trenches as a GAP and Environmental compliance strategy.

The Activity partnered with Uganda Coffee Development Authority and Ag-Inputs Activity to build the capacity of traders, VAs, and nursery operators in proper input usage, safe handling of inputs and Integrated Pest Management (IPM).

Five business to business meetings were held in Nebbi, Iganga, Bushenyi, Ibanda and Kasese districts to train registered coffee nurseries on agro-input usage and GAP to provide access to quality plantlets and opportunities for business linkages.

Middle value chain actors including Kibinge Cooperative Society, Bukonzo Joint and Bukonzo Organic Cooperative Societies, Okoro Coffee Limited partnered with companies such as Balton, Export Trading Company, Uganda Relief Supplies to gain access to inputs for their farmers. As a result, Bukonzo Organic Cooperative societies and Okoro Coffee Ltd procured for sale to their farmers a total of 2,000 tarpaulins worth \$ 40,000 while Kibenge Cooperative Society supplied inputs to their farmer members worth \$60,000

Under the SAF, the Activity funded a study on investment opportunities in the rapid multiplication and distribution of coffee planting materials. While industry stakeholders believe that the demand for coffee planting materials including coffee wilt disease resistant materials is on the rise, the study seeks to ascertain whether there is effective demand to attract private investment in the multiplication and distribution of coffee planting materials (clonal cuttings, elite seed, or tissue culture).

Sub-IR 1.3: Increased Access to Production Support Services

Traders investing resources to promote labor saving technologies among VAs



Photo 16: VAs and Youth Spray teams attending a practical session during the Safe Use and Handling of Agro-inputs training in Kakiri, Wakiso District.

The Activity partnered with agri-equipment suppliers to promote labor saving technologies such as motorized knapsacks to traders, cooperative societies, and villages. In total, 20 cooperative societies and traders and 63 VAs learned about the efficiency of using the motorized spraying pump.

To bridge the gap in access to extension services provision, the Activity coached and mentored traders and their VAs in providing para-extension services to farmers including spraying and pruning.

As a result, Kibinge Farmers' Cooperative Society placed an order for two motorized knapsacks worth UGX 400,000, which were rented by eight youth groups which provided spraying services to control weeds for over 2,000 coffee farmers.

The Activity also cost shared with 52 middle value chain actors to procure 500 pruning saws and 356 secateurs to promote the recommended pruning practice.

Benchmarks: IR 1 Coffee Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
At least 29 coffee traders who utilize VAs identified for partnership by September 30, 2014	52 traders identified for partnership with 373 village Agents
At least 30,060 farmers exposed to improved management practices by VA's through learning sites by September 30, 2014	26,107 farmers exposed to Improved management practices through learning sites, on-farm trials and through demonstrations during coffee shows.
At least 100 successful Ag-Inputs Activity supported stockists identified and linked to VAs by September 30, 2014	58 successful Ag-Inputs Activity supported stockists identified and linked to VAs
At least 252 VAs linked to coffee traders trained in pest surveillance, proper use and safe handling of agrochemicals by September 30, 2014	423 Village Agents linked to traders trained in pest surveillance, proper use and safe handling of agrochemicals
At least 5 CWD Robusta resistant material mother gardens and 10 coffee nurseries both Arabica and Robusta established by September 30, 2014	No mother gardens and nurseries established. This intervention depends on results from the study being completed to assess the current status and potential for multiplication and distribution of coffee planting materials in Uganda, conducted in the last quarter of the year.
At least 15 coffee actors linked to production support service providers including banks by September 30, 2014	39 VC actors linked to production support services (exporters- 16, cooperatives- 23)

Exposure to premium markets

3,620 bags (each 60 kg) were exported to a new Q&R premium end market in USA as a result of an export trial experience conducted in partnership with Coffee Quality Institute, UCDA and Uganda Coffee Federation (UCF).

IR 2 INCREASED ACCESS TO COMPETITIVE MARKETS

Sub-IR 2.1: Improved Market Linkages

Smart investments to increase access to premium markets

To strengthen Uganda coffee producers' trade capacity and competitiveness in global coffee markets, the Activity partnered with Coffee Quality Institute (CQI), UCDA and Uganda Coffee Federation to carry out an export pilot involving eight exporters. CQI trained the exporters on coffee standards and methods used to identify and code Arabica (Q) and Robusta(R) coffee lots. The exporters submitted a total of 62 samples (36 Arabica and 26 Robusta) which were graded for cup, green, and roasted quality using Specialty Coffee of America Association (SCAA) standardized methods and new Robusta standards. As a result, 3,620 bags (each 60 kg) were exported to a new Q&R premium end market in the United States of America. Exporters included: Kyagalanyi, Kawacom, Nitubaasa, Great Lakes Coffee, Kabum Trading Company, UGACOF, and Savannah Commodities/Star Café.

The Activity cost shared with middle value chain actors to expose traders to new market opportunities:

- **Economic Summit for Agricultural Production and Trade Promotion organized by Lwengo district in the greater Masaka area-** Kibinge Coffee Farmers Cooperatives Society, mentored by the Activity, focused on showcasing their services and opportunities to attract new membership to boost their output to meet market demand. An additional 1,340 farmers were attracted to join the society as a result.
- **Agribusiness Expo 2014 in Mbale** - Exposed cooperatives such as Bukusu ACE (4,021 members) to new trade opportunities with exporters including Kyagalanyi and Peace Kawomera. A contract was signed with Kyagalanyi to supply them with 60 MT of exportable grades of coffee.
- **USAID COMPETE Taste of Harvest (TOH)** - The Activity facilitated six partner traders to participate in the competition which attracts regional and international producers, exporters, and buyers. As a result, Peace Kawomera signed a contract with Coexist Campaign from Maryland USA valued at \$403,000.
- **District Coffee Shows:** The Activity worked with Café Africa to organize and conduct 12 District coffee shows which exposed communities to new input suppliers and improved management technologies. These shows attracted 13,379 farmers, including 4,608 youth, and sold USD 27,100 worth of seedlings.



Photo 17: Farmers at the Kibinge Coffee Farmers Cooperative Society booth at the Lwengo District Economic Summit.

Sub-IR 2.2: Increased Access to Market Support Services

The Activity coordinated information updates on market support services such as: access to current market prices; finance access; market requirements and standards; crop quality; available and new service providers to smallholder farmers through traders and VAs. Timely and consistent access to the right information facilitates profitable and efficient coffee production and a vibrant trade environment.

Quality assurance support for the improvement of coffee standards



Photo 18: VAs at WEBCOFU being trained on Pulping, screening and the different FAQs of coffee.

The Activity trained 51 washing stations managers and technicians of middle value chain actors including NIHACOFA, Kyagalanyi, UCPCU, Peace Kawomera, ACPL, Bukonzo Organic, and Budadiri coffee firms to improve on outturn and quality.

The Activity provided technical input on the standards required of hulling facilities for incorporation into the 1991 Coffee Statute and Regulations, which is under review by the coffee industry with financial support from the Enabling Environment for Agriculture Activity.

Coffee World Ltd with the Activity's guidance developed a business strategy to undertake investment in an export processing plant in the West Nile region (Nebbi and Zombo districts). As a result, they are installing a processing plant

worth \$346,620 which will benefit 18,221 farmers. This will expand market access for farmers in the region.

Sub-IR 2.3: Improved Post-Harvest Handling

The Activity promoted strategies for adoption of system improvements including key elements of quality deterioration from harvest through wet processing, drying, grading, storage, and transport.

Successful Linkage boosts Traders to Incentive Farmers

The meetings attracted 221 representatives including 20 cooperative societies, 14 traders, one producer organization (PO) and 176 VAs, with five Ag-Inputs stockists and five inputs suppliers. As a result of the new business linkages between traders and inputs suppliers, Nyongyera Medrine Agro Dealer supplied 500 tarpaulins worth \$9,500 to four societies under Ankole Coffee Producers Cooperative Union that included: Katenga (100), Rwebijunjure (150), Kigarama (100), and Kajunju (150) improving the quality of their output. As result of using the tarpaulins for post-harvest handling, the Union paid to farmers who utilized them, an additional UGX 25 above the price offered to other farmer suppliers.

Knowledge and Skills transfer

Traders were educated about the benefits of offering quality through differentiating pricing as a means of incentivizing farmers to produce quality coffee. A total of 18 Coffee Washing Stations (CWS) managers from Ankole Coffee Producer Cooperative Union (8) and Ankole Coffee Processors Ltd (10) participated in the training.

The Activity coached nine traders and 56 VAs on coffee quality improvement with reference to quality price differentiation depending on Fair Average Quality (FAQ) and dried cherry (Kiboko) market standards. Similarly two Unions (ACPCU with 19 societies and Bisheshe Coffee Producer Association) and their 48 VAs received trainings on conducting simple coffee outturn assessments in order to provide feedback to farmers to improve their coffee quality. Training in FAQ processing techniques and outturn testing was also provided for 209 agents and traders.

Benchmarks: IR 2 Coffee Value Chain Year 1 Benchmarks and Progress

Benchmarks	Achievements
At least 5 partner traders supported to participate in USAID COMPETE Taste of Harvest (TOH) and annual regional exhibition events by September 30, 2014.	6 partner traders supported to participate in USAID COMPETE Taste of Harvest (TOH) and annual regional exhibition. events
At least 5 coffee traders adopt the model of buying coffee at quality differentiated prices by September 2014.	43 coffee traders adopted the QDP model.
Support Café Africa to organize and conduct 21 district coffee shows by December 2014.	Supported Café Africa to organize and conduct 12 district coffee shows.
At least 252 agents and traders trained in FAQ processing techniques and out turn test by September 2014.	A total of 209 agents and traders trained in FAQ processing techniques and out turn test

4.0 PROGRAM MANAGEMENT

Behavior Change: Sparking Transformation across the Value Chain

Across the value chains are relationships- informal and formal rules that have traditionally governed transactions. By influencing positive behavior among middle actors in the value chains, the Activity works to transform relationships, trigger increased productivity, enhance market access and ultimately stimulate higher quality commodity production. It starts with understanding the prevailing dynamics through research as to strategically ignite positive behavior to benefit all the players.

Research-value chain governance

The Activity completed a study on value chain governance, to identify leverage points and systems in place that coordinate, regulate, and control how production, marketing, and business decisions are made particularly in maize and beans value chains. Study sites were established in Bushenyi, Kampala, Mbale and Gulu sampling exporters, local traders, and processors.

Key research findings in Kampala

- Grain quality compromised: Overall grain pricing in the central region is influenced by the Kisenyi produce market, in downtown Kampala because the market accepts every type of grain quality type. This inhibits any incentive for traders and producers to produce better quality grain because they know they can sell their grains at a ready market even if the quality is poor.
- Urban grain chiefs: In most urban markets there are distinct areas where grain is marketed. The Chairpersons of these urban grain hubs greatly influence day-to-day pricing within the parameters of supply and demand.
- Grain stocking: The period after the second season harvest emerged as the most strategic season for stocking grain because the crops have dried thoroughly due to a longer dry season.
- Knowledge on quality assurance: Most maize and beans grain traders were unaware of official grain quality standards except for moisture content levels. Producers interviewed did not think quality assurance for their grain was a major issue as they did not expect any additional profit for improving their produce. In addition the study indicates the Uganda National Bureau of Standards was not effective in monitoring quality as the organization is under-staffed.

Next Steps

Development of a concept and procedures document for value chain technical advisors to guide the relationships between different actors along the value chain at the implementation level to support the training, coaching, and mentoring of traders on grain standards, including rules and regulations of the cross border trade.

Partner with Enabling Environment for Agriculture, and government agencies such as UNBS to increase awareness and knowledge of national grain standards.

Research- Input adoption

A Knowledge Attitudes Behaviors and Practices study with regard to adoption of agro inputs by small holder farmers in order to determine the appropriate ways to influence desired behavior change.

Key Recommendations:

Guarantee Access- Promote door to door delivery approach for input dealers or stockists to guarantee quality products reach farmers

Promote Savings- Create sustainable saving strategies to enable farmers successfully save for inputs so that they can translate their intention to purchase into action including reminder cues to save for inputs as soon as farmers receive pay for their produce.

Partner with Champions- Partner with role models (early adopters) willing to promote and share success with peers. Equip VAs to promote their messages through these champions maximizing already existing structures such as farmer groups.

Change Process- Educate VAs on typical human change process to enable them to encourage farmers to adopt utilization of quality inputs.

Monitoring, Evaluation and Learning

The Activity operates a robust Monitoring, Evaluation and Learning system to enable information capture in real-time across all project interventions, ongoing learning and adaptation of activity strategies for best outcomes.

Key achievements

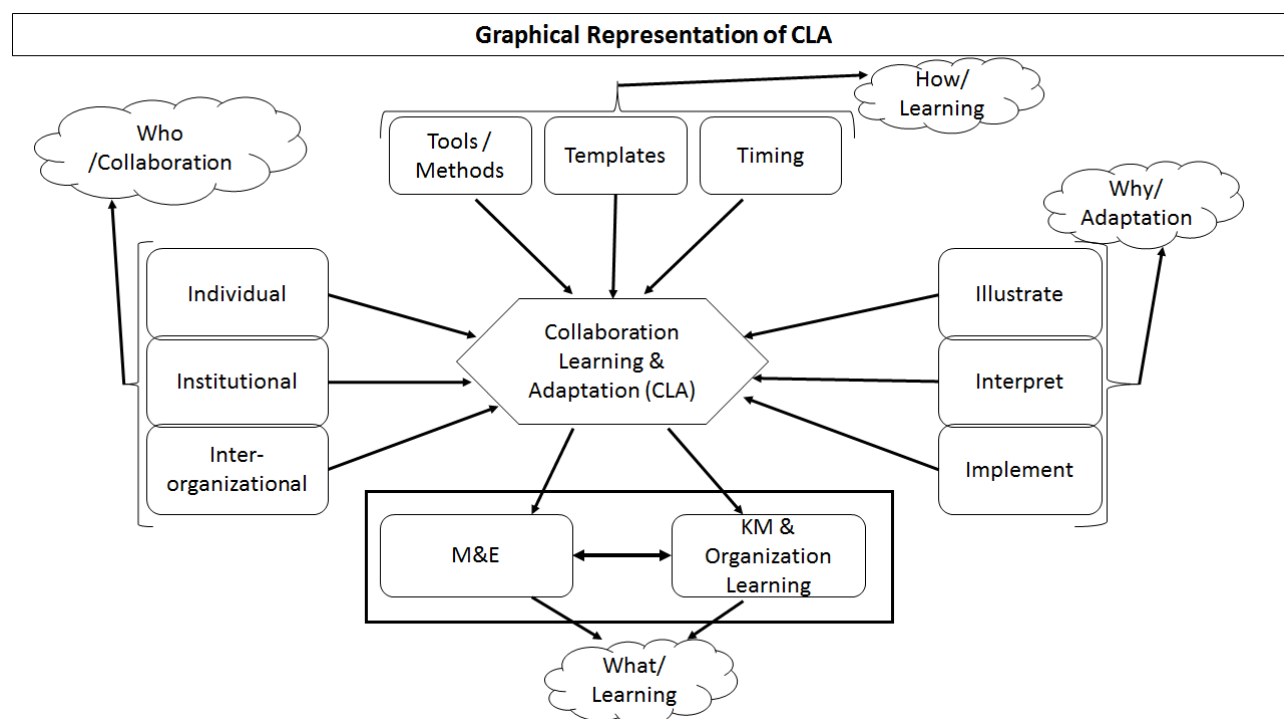
Prior to field implementation, the Activity conducted a survey to understand the environment in which the Activity would be implemented. The Activity submitted a baseline survey report to USAID and utilized the findings to set targets and the value chain strategy development processes.

The ME&L team developed a Monitoring and Evaluation Plan approved by USAID. To operationalize data collection for the agreed upon indicators in the M&E plan and identified data sources, procured data collection tools, and developed and rolled out user guides. The ME&L team trained and mentored the data collectors, including Activity staff and VAs, to ensure effective data collection. In addition to data collectors, the Activity identified secondary data sources (e.g. UCDA and UBOS) to improve accuracy.

Utilizing the Strategic Activities Fund (SAF), the Activity developed a Management Information System (MIS) to aggregate indicator data to improve accuracy and effectiveness in reporting achievements. The MIS will handle both qualitative and quantitative data. The subcontractor- Data Care Uganda trained the Kampala technical team on how to utilize the MIS for data entry and to generate reports. In addition a directory to record the BDS providers utilized across the supported value chains to enable easy access to BDS providers by value chain actors.

To operationalize the learning agenda, the unit developed the Activity's knowledge management and communication strategies. In collaboration with the Learning contract, the two strategies were later analyzed and reviewed to improve effectiveness in promoting individualized, institutional and inter-institutional learning and growth. A graphical CLA chart was developed to aid the Activity in learning.

Chart showing graphical representation of CLA



To inform seasonal planning in promoting learning sites and in conducting input linkage meetings, the team conducted a learning review to assess the effectiveness of the demonstration strategy. The assessment focused on what worked well and what did not well. As a result of the findings a bottom up planning for learning sites was implemented. The assessment revealed that while learning sites demonstrated that improved seeds, fertilizers and chemicals combined with Good Agronomic Practices improved productivity, the strategy was still faced with challenges that included late delivery of demonstration kits, training gaps and low quality seeds from a few suppliers across the value chains.

To ensure learning and adapting to improve achievements, the Activity conducted a three-day pre-season planning meeting in Mukono on January 22–24, 2014. The meeting attracted more than 100 participants who comprised of 93 traders/VAs, seven inputs supply companies (NASECO, FICA Seeds, Pearl Seeds, Simlaw, Grow More, Balton and Bayer), one export/processor company (Joseph Initiatives), one financial institution (UDB), and one government official. During the meeting, Komayombi Bulegeya, Commissioner Crop Protection, Ministry of Agriculture Animal Industry and Fisheries (MAAIF) emphasized the role of traders in ensuring that farmers receive quality inputs and encouraged them to devise means of bringing farmers, input dealers and extension workers to work together. At the meeting, middle value chain actors developed a pre-season work plan, which they shared with inputs suppliers indicating preferred crop varieties and fertilizers required per region. Seed companies pledged to partner with the Activity in training VAs and their farmer groups on proper handling and safe use of inputs.

On behalf of the Activity, the ME&L unit guided the three Temporary Duty (TDY) team from Micro and Private Enterprise Promotion (MPEP), Bureau of Food Security (BFS) and Leverage Economic Opportunities (LEO), TDY team in understanding the Activity's approach to conducting monitoring and evaluation under a facilitative approach.

Results of partner meetings organized by USAID following field tours and deliberations:

- **Action plan**, focused on developing results chains for supported value chains and promotion of internal learning. The ME&L team developed an action plan and shared it with the Mission M&E team, Contracting Officer's Representative and Learning Contract team.
- **An outcome mapping exercise** for the three commodities (beans, maize, and coffee) took place as part of the action plan and three result chains were developed. The results chains guided the Activity in promoting relevant interventions and gauging early progress markers that can result in behavior change among the middle value chain actors.

Participating Implementing Partners (IPs) included the Ag-Inputs Activity and Learning contract, and government agencies such as Uganda Coffee development Authority (UCDA) and representatives from the USAID Mission participated in the exercise.

The ME&L team conducted a results chain assessment to evaluate adoption levels of promoted innovations among middle value actors to inform year two work planning and year one annual report writing processes. The assessment revealed that majority of middle value chain actors were either preparing to start or have already started on the uptake process of proposed innovations. To speed up the uptake process, the study proposed that the Activity:

- Support middle value chain actors to effectively develop business plans
- Increase learning opportunities between middle actors
- Offer on one on one mentorship and coaching opportunities of middle value chain actors
- Formalize partnerships through signing MoUs with middle value chain actors
- Conduct an assessment at beneficiary/smallholder farmer level linked to middle actor who are in implementation and maintenance stage.

To ensure stakeholder involvement in planning and alignment of interventions to meet value chain upgrading gaps, the ME&L team organized middle value chain actors' meetings across supported value chains and in 4 regions to receive feedback, and articulate successes and challenges. The suggestions given in these meetings were shared with participants in year two work plan and formed a basis for determining year two interventions.

Key Recommendations:

- Scale up awareness on quality standards and PHH.
- Link actors to suppliers of analytical equipment (e.g. moisture meters), promote cost sharing and provide updated inventory of credible exporters, processors (*quality-conscious buyers*), and trust- worthy agro input dealers.
- Promote packaging of fertilizers in smaller units.
- Promote construction of appropriate PH storage facilities, e.g. maize cribs, and simple solar dryers.
- Increase business to business meetings and tours to strengthen relationships.
- Enhance capacity of traders and VAs in record keeping, financial management, entrepreneurship skills, and business planning.
- Provide more information on access to the labor saving technologies.
- Increase linkages to financial institutions.
- Promote a warehouse receipt system.
- Work with government and other stake holders (EEA) to emphasize current guiding policies.

Benchmarks: Monitoring, Learning and Evaluation Year 1 Benchmarks

Benchmarks	Achievements
Baseline survey conducted by July 2013	A baseline survey conducted
PMP developed and approved by September 2013	PMP developed and approved February 10, 2014
Activity MIS/ database developed by January 2014	1 MIS development completed and Activity staff trained on how to use the MIS
Village Agents trained in use of the Activity data collection tools	704 VAs trained in use of the data collection tools
Value chain teams trained in utilization of data collection tools by December 2013	A total of 12 value chain teams and 405 VA trained in the utilization of data collection
Semi-annual review meetings (February and August) with technical team and other stakeholders to review the progress under each value chain and August 2014	One work plan review meeting held with stakeholders who included representatives from UCDA, Ag. Inputs and Learning Contract in April 2014 and One review meeting held with technical staff in July 2014
Commodity results chains developed by December 2013	Three commodity result chains were developed in beans, maize and coffee
Knowledge Management and Communication strategy developed by August 2013	Knowledge Management and Communication strategy developed and implemented
Year one lessons learned and/or success stories developed by September 2014	One learning review of demonstration strategy concluded. 10 success stories written and disseminated

Environmental compliance

Environmental Management and Monitoring Plan (EMMP)

The Activity submitted the final Environmental Management and Monitoring Plan (EMMP) to USAID for approval. To improve EMMP implementation and reporting achievements, the ME&L team conducted refresher trainings for regional technical teams focusing on understanding the mitigation measures, monitoring indicators, and deliverables. Regional staff responsible for guiding EMMP implementation held regional visits among the middle value chain actors to monitor and record EMMP related data, making relevant adjustments to current practices and which were reported back quarterly including lessons learned.

The Activity addressed mitigation measures for IR 1.1 (Increased use of improved farm management practices) and IR1.2 (Increased use of high quality agricultural inputs). The Activity continued to provide TOT trainings to VAs in good agronomic practices, labor-saving technologies, input utilization, good storage and logistics, safe use and handling of inputs, and natural resource management. The village agents transferred these skills to farmers and provided monitoring support during weeding, second fertilizer application, harvesting, and post-harvest handling. Village Agents also promoted mitigation measures practiced among farmers included but not limited to terracing, trenches, cover crops, minimum tillage, basin cultivation, hedge rows, line planting, and avoiding burning. Demonstration sessions were held to teach farmers safe use and handling of fertilizers, as well as use of protective gear.

Table 3: Participants in the safe use and handling of inputs and environmental compliance trainings

Safe Use and Handling of Inputs/ Pesticides and Environmental Compliance Trainings	
Type of Individual	No. of Individuals trained
Input product knowledge & input linkages	
Agro-Input dealers	62
Traders	3
Farmers	9,104
VAs	933
Environmental mitigation practices	
Farmers	356
Total	10,458

As described in the three value chain sections of this report, continuous knowledge transfer of environmental compliance mitigation measures to traders and their VAs has translated into adoption of good practices by farmers.

Engagement with U.S. Peace Corps and the Government of Uganda

A ‘whole government approach’

Peace Corps volunteers

As part of the Feed the Future’s emphasis on whole US Government approach, the Activity finalized arrangements to engage Peace Corps volunteers to support value chain actors in improving their produce and earnings. The Peace Corps volunteers, with an initial placement of four volunteers supported 35 traders and their 349 VAs in entrepreneurship skills which include records keeping aimed at improving service delivery to farmers.

Collaboration with Uganda Government

To ensure that value chain actors are reached effectively with Activity interventions, partnerships were established with district departments and other pertinent stakeholders such as sub-county chiefs, sub-county NAADS coordinators and Community Development Officers, who directly interface with farmers. The Activity participated in District Operational Planning (DOP) meetings in Lira, Dokolo, Mbale, Sironko, Kapchorwa, Gulu, Bushenyi, and Kamuli districts. The DOP meetings enable implementing partners to follow national guidelines, collaborate more effectively to avoid duplication, monitor government programs like NAADS which supply farmers with inputs and leverage leaders’ local knowledge about farmers and agricultural practice.

Institutional efficacy

A one day workshop was held to strengthen collaboration between the Activity and USAID/Uganda FTF Enabling Environment for Agriculture Activity involving 34 activity staff and senior leadership. The workshop provided an environment for information sharing and learning, with opportunities for participants to define strategic intersection points and areas for future collaboration. Key workshop results included deepening of partnerships, review of project goals, and concrete steps to address challenges and accelerate collaboration, learning, knowledge management, and integration to maximize impact.

Key workshop resolution:

Field-driven challenges and opportunities observed by the Activity must inform and drive Enabling Environment for Agriculture Activity's policy and regulatory analysis, knowledge sharing, and advocacy work. In turn, policy, regulatory, and standards information must be used by the Activity to inform those working in and supporting the value chains, from farmers to buyers to local government officials.

The Activity continued to collaborate with EEA and Ag. Inputs in several interventions captured in detail within the three value chains sections. However, the following were some of the highlights of the collaborations;

EEA:

- Maize and Beans platform- collaboration on how raising awareness of the new EAC maize grain standards.
- National Coffee platform – collaboration on how to expand coffee planting materials
- Climate Change- collaboration on how to integrate climate change in CPM interventions
- National Youth Event- jointly launched the national youth event
- Collaboration meeting- identify and clarify areas of collaboration

AIA:

- Agro Input Dealers- linking supported middle value chain actors
- Farmer Field Days / Trade Shows / Exhibitions- fostered linkages and exposed business opportunities between traders and their associate VAs/farmers with Ag. Inputs supported agro input wholesalers
- Consultative meetings / Trainings- on opportunities to access genuine inputs and equip additional workforce to provide skilled spraying services and input usage.
- Activity work plan and outcome mapping workshops- identify areas of collaboration and clarify overlapping interventions

Activity administration**Improving partner operations management**

The Activity conducted an organizational capacity assessment of the Activity's local management partner, Rural Enterprise Development Services (REDS). REDS received a score of 2.7 on the OCA scale indicated that REDS performed above average.

However, per the OCA recommendations the organization hired a financial advisor to help improve financial management, documentation processes, as well as updating operations and procurement manuals to include instructions for working with individual donors including USAID. The Activity will review manuals to ensure compliance with all USAID guidelines. The OCA also recommended conducting a market survey to identify potential opportunities for REDS.

Safety and security strengthening

The Chemonics Safety and Security Director assessed the Activity's security platforms, identified security requirements, and assessed the performance of organization security providers. Following the recommendations, the Activity bolstered its security systems and procedures.

Personnel

All Activity staff completed the Standards of Business Conduct training in the areas of procurement, recruitment, and finance to strengthen compliance with USAID and Chemonics policies and procedures

Youth Map Internship Program

Three interns, Ester (Finance), Nelson (ME&L), and Patience (Communications) started on 1st March 2014 to work with the Activity for 6 months under the Youth Map Internship Program designed to equip graduates with employability and leadership skills.

5.0 LESSONS AND OPPORTUNITIES

Promising Innovations

- **Bean yields boosted through quality fertilizer and an improved seed variety:**

Bio-deposit fertilizer-The introduction of the bio-deposit foliar fertilizer at bean learning sites resulted in impressive plant vigor with farmers anticipating improved yields and greater marketable surpluses. Data from VAs shows that demand for the affordable fertilizer is on the rise. The combination of bio-deposit fertilizer and good quality improved bean seed variety resulted in increased number of bean pod numbers per plant, larger pod sizes, and increased number of seeds per pod.

- **Better planting techniques result in improved bean harvests**

Agro-ecological zones-The appropriate placements of bean varieties in relation to agro ecological zones, for example NABE 12C adapted well the Elgon region. Weather conditions coupled with rich volcanic alluvial soils lend themselves to suitability of this variety in the highland areas. There is also a ready market for the beans in both their fresh and dry forms.

Intercropping -Short maturity bush type beans also performed well in the lower altitude areas, including as an intercrop in pruned coffee fields

- **Innovative models increased access to affordable quality agro-inputs for better yields**

Efficient “middle” value chain actors-The Village Agent Retail Model (VARM) and the Trader partner-Village Agent Model played a significant role in ensuring that farmers accessed quality inputs for production. The direct linkages of the trader partners with seed and input companies facilitated quicker access to quality seeds and other agro-inputs at relatively low costs.

Hands on learning and sharing- Learning sites provided important platforms for the introduction of improved technologies and field interface between village agents and farmers. The striga-weed resistant Longe 7H-IR maize variety from NASECO Seed introduced through the sites in these 8 districts infested with the striga-weed performed so well that farmers expect a doubling of their yields. Demand for the seed variety in the affected areas is high.

Skill transfer – In line with the Uganda coffee industry’s endorsement of pruning as a beneficial practice, Activity partners used learning sites to demonstrate proper pruning techniques, as an inexpensive yet effective method to enhance productivity. The 2014 theme promoted in district coffee shows was “*Planting and Pruning for Sustainable Income*”.

Collaborating, Learning and Adaptation

Partnering with Agricultural Inputs Activity- Together the Activities linked partner traders and their village agents to reliable agri-input dealers in the various regions which resulted in greater sales and improved access to quality inputs. The Activity also collaborated with the Ag-Inputs Activity during field days organized by Activity partners in the central and eastern regions which enabled various actors including agri-input dealers, to share and receive feedback from traders, village agents, and farmers.

Increased collaboration with district technical teams-The Activity targeted district technical staff, specifically those involved in production and marketing. Periodic joint field visits to Activity partners, and participation in field day events and trainings enhanced support for the Activity’s approach at the district level.

Responsive business relationships – Through effectively managing learning sites, VA's and traders successfully increased demand for inputs and built trust from stockists who considered the former as strategic partners for increased sales.

Capacity building- National Coffee Steering Committee (NCSC) meetings held each month provided opportunities for interface, including coaching and mentoring sessions with exporters, traders and agents on best practices. The Activity conducted joint trainings with FTF Ag-Inputs field teams in Bushenyi, Ibanda, and Kasese districts targeting Value Chain actors in those regions.

Challenges to Scaling Interventions

Stockouts compromised fertilizer benefit-The use of labor-saving technologies like automated spray pumps increased demand for the equipment and utilization of foliar fertilizers. The demand however surpassed supply of the pumps, which compromised the full benefit that would have been realized by maximizing application of the foliar fertilizer.

Beans specifications posed difficulties-Staking materials for climbing beans in highland areas where the beans perform best are often difficult to obtain, while the short maturity bush bean varieties are also susceptible to heavy rains in lower altitude areas. These factors limited good harvests in those areas. Additionally soaking of beans seeds with the Bio deposit foliar fertilizer led to poor germination in some instances where instructions were not properly followed.

A mindset issue-The potential and time required for learning sites to effect a turn-around in uptake of improved technologies showcased does not match the expectations of some partners with limited interest and or knowledge of the Facilitative Approach. Some trader partners, village agents, and farming communities still expect direct support to make upgrades.

Mentoring matters-In order to maximize farmer and trader outputs there is still a gap that needs to be bridged as VAs focused solely on profit making. Village agents need to take the time to mentor farmers and traders so as to realize a desired turn around.

Unpredictable weather-Unexpected changes in the weather caused delayed planting in some areas and insufficient rainfall led to poor field crop performance in other areas. Long dry spells in the northern region after VAs received seed materials negatively affected planting time, germination, and crop performance.

Insufficient grain quality and quantity-The low volumes produced by small holder farmers dispersed over large production areas and the poor quality of grain handled by farmers is still a hindrance in enabling them to access competitive markets. A major challenge especially in marketing of beans is the failure by traders and village agents to obtain sufficient volumes of single variety/color grains consolidated at particular bulking points. Additionally, seed from almost all seed companies had a high percentage of broken seed which affected field establishment or caused a reduction in the area planted.

Prohibitive Costs-The high cost of agri-inputs and the prevalence of fake inputs on the market limits farmers' confidence in making investments in improved agri-inputs. In addition, some VAs and traders are willing to invest in quality inputs but lack sufficient capital.

Coffee demographics-The majority of coffee farmers are 50 years or above and have low-levels of formal education. As a result, they require practical, hands-on demonstrations of the benefits or incentives of adopting innovations or improved practices. Given the nature of the coffee crop, it takes at least one crop cycle (a calendar year) to observe tangible changes. This means more time and a tailor-made approach is required to empower these farmers to commit and achieve profitable harvests.

S/No	Indicator	Indicator Type, No & Level	Unit of Measure	Baseline	LOA Target	Target - FY14	Achievement FY 14	% Achievement	Comments	
Purpose: Sustainably increase the production and marketing of high quality maize, beans, and coffee in 34 focus districts										
1	Gross margin per unit of land, kilogram, or animal of selected product (crop/animal/fisheries selection varies by country)	FTF (4.5-4) Outcome	USD/Ha	Beans	263	330	275	249	91%	
				Coffee	222	450	260	251	97%	
				Maize	495	620	520	567	109%	
2	Value of incremental sales (collected at farm- level) attributed to FTF implementation	FTF (4.5.2-23) Outcome	USD	-	171,700,000	9,600,000	7,547,941	79%	Price fluctuations in second season, some farmers have not sold yet: Country price is higher than export price, most produce is put on hold	
Sub IR. 1.1: Increased use of improved farm management practices										
3	Number of Individuals who have received U.S. government supported short-term agricultural sector productivity or food security training	FTF (4.5.2-7) Output	Number	-	420,000	105,000	116,613	111%	Demonstrated technologies (foliar fertilizers, improved seed) at learning sites created demand for trainings by village agents	
4	Number of farmers and others who have applied new technologies or management practices as a result of U.S. government assistance	FTF (4.5.2-5) Outcome	Number	-	290,000	58,000	52,276	90%	Smallholder are adopting technologies that require few assets, have a lower risk premium, and are less expensive. This will improved by improving access to credit using the DCA in Yr. 2	
5	Number of food security private enterprises (for profit), producer orgs, water user associations, women’s groups, trade and business associations, and community-based organizations receiving U.S. government assistance.	FTF (4.5.2-11) Output	Number	-	27,600	4,300	4,473	104%	Consist of 444 CBOs, 3913 POs, 116 private Enterprises	
6	Number of farmers benefiting directly from Activity interventions	Custom	Number	0	400,000	120,000	109,633	91%		
7	Number of members of producer organizations and community-based organizations receiving U.S. government assistance.	FTF (4.5.2-27) Output	Number	-	280,000	84,000	80,731	96%		
8	Number of private enterprises (for profit), producer orgs, water user associations, women’s groups, trade and business associations, and community-based organizations that applied new technologies or management practices as a result of U.S. government assistance.	FTF (4.5.2-28) Outcome	Number	-	13,900	2,200	2,302	105%		
9	Number of hectares under improved technologies or management practices as a result of U.S.	FTF (4.5.2-2)	Number	-	120,300	20,800	31,050	149%	High buy-in to improved seed (bean and Maize) and	

S/No	Indicator	Indicator Type, No & Level	Unit of Measure	Baseline	LOA Target	Target - FY14	Achievement FY 14	% Achievement	Comments
	government assistance	Outcome							foliar fertilizer
10	Number of labor-saving technologies that meet women farmers' needs made available for transfer-Output	Custom	Number	-	14	4	4	100%	
Sub IR 1.2: Increased use of high quality agricultural inputs									
11	Input sales by activity-assisted intermediary business models	Custom Outcome	USD	950,000	4,010,000	803,000	981,817	122%	High adoption of improved seed, e.g. "Longe 7H-IR, Longe 10H, NABE 15, NABE 12C, foliar fertilizer among low income farmers, tarpaulins.
12	Percentage of farmers acknowledging positive benefits from the accessed inputs	Custom	Percentage	0	31%	18%	73%	406%	Performance of seed varieties, direct linkage to genuine input suppliers supported by Ag-Inputs Activity, Door to door delivery mechanism - VARM model
13	Percentage of farmers purchasing inputs from village agents and other promoted models	Custom	Percentage	0	34%	20%	58%	292%	High benefits associated with input sales, performance of technologies, learning sites created demand,
Sub IR 1.3: Increased access to production support services									
14	Number of radio, SMS, and other media awareness programs designed to encourage youth to work in value chain businesses implemented	Custom Output	Number	0	10	2	2	100%	
15	Number of youth apprenticeships in value chain businesses brokered by the Activity	Custom Output	Number	0	115	40	25	63%	Piloted preliminary activities to understand youth interests, idea to be sold to middle VC actors in Yr2
16	Number of rural households benefiting directly from U.S. government interventions-Output	FTF (4.5.2-13) Output	Number	0	215,000	65,000	65,229	100%	
17	Number of jobs attributed to FTF implementation	FTF (4.5-2) Output	Number	0	382	146	208	142%	Technology uptake like maize sheller and cleaner (40 male, 22 males, 2 male, 31 male) - Spraying services - seed growing promoting spraying services- mandatory control of diseases and

S/No	Indicator	Indicator Type, No & Level	Unit of Measure	Baseline	LOA Target	Target - FY14	Achievement FY 14	% Achievement	Comments	
									pests	
18	Value of Agricultural and Rural Loans	FTF (4.5.2-29) Output	USD	0	2,890,000	441,000	322,323	73%	Banks took a lot of time to structure the product to fit into activity supported middle VC actors, The model for UDB was under testing with limited roll-out.	
19	Number of MSMEs receiving USG assistance to access bank loans	Standard PE: 4.6.2	Number	0	100	25	24	96%		
IR. 2: Increased access to competitive markets (domestic, regional and international)										
20	Number of public-private partnerships formed as a result of FTF assistance	FTF (4.5.2-12) Output	Number	0	480	185	134	72%	Slow buy-in process into approach and managing expectations for free money	
21	Value of new private sector investment in the agriculture sector or food chain leveraged by FTF implementation	FTF (4.5.2-38) Outcome	USD	0	10,450,000	2,710,000	2,287,954	84%	Slow buy-in process into approach and managing expectations for free money	
Sub IR 2.1: Improved market linkages										
22	Volume of exports by Activity assisted traders and exporters	Custom output	MT	0	288,900	109,700	140,761	128%	World prices for coffee rose in respect to drought in Brazil	
23	Number of e-payments completed by value chain actors as a result of the activity's promotion of USAID's Better than Cash Initiative	Custom Output	Number	0	81,600	8,160	6,342	78%	Low buy-in by farmers; trust building issues between traders and farmers ,	
Sub IR 2.2: Increased access to market support services										
24	Number of MSMEs, including farmers, receiving business development services from U.S. government assisted sources	FTF (4.5.2-37) Output	Number		0	11,250	450	394	88%	Low capital base of Middle VC actors to procure services for upgrading. This will improved by improving access to credit using the DCA in Yr. 2
Sub IR 2.3: Improved post-harvest handling										
25	Reduction in post-harvest losses by activity-assisted smallholders	Custom Outcome	Number	Beans	18%	9%	18%	11%	61%	smallholder are adopting technologies that
				Coffee	7%	4%	7%	6%	86%	

S/No	Indicator	Indicator Type, No & Level	Unit of Measure		Baseline	LOA Target	Target - FY14	Achievement FY 14	% Achievement	Comments
				Maize	25%	13%	25%	17%	68%	Require few assets, have a lower risk premium, and are less expensive. This will improved by improving access to credit using the DCA in Yr. 2
26	Total increase in installed storage capacity	FTF 4.5-5 Outcome	Cubic Meters		0	24,000	4,800	4,804	100%	
Other Indicators Specific to Gender and Climate Change										
27	Percentage of female participants in U.S. government-assisted programs designed to increase access to productive economic resources	GNDR - 2 Output	Percentage		0	40%	40%	47%	116%	
28	Proportion of females who report a change in self-efficacy at the conclusion of U.S. government-supported training/ programming	GNDR-3 output	Percentage		0	30%	5%	3.67%	73%	smallholder are adopting technologies that Require few assets, have a lower risk premium, and are less expensive. This will improved by improving access to credit using the DCA in Yr. 2
29	Number of stakeholders implementing risk-reducing practices/actions to improve resilience to climate change as a result of USG assistance	FTF (4.5.2-34) Outcome	Number		0	210,000	52,500	48,154	92%	

Note: Exchange Rate is 1USD=2,500 UGX

Annex 2
QUARTERLY FINANCIAL REPORT
July - September
2014

Budget Line Item	Budget	Actual and Accrued Expenditures Through End of This Quarter					Remaining Funds
		Actual Expenditures Through End of June 2014	Actual and Accrued Expenditures - July to September 2014				
			July 2014	August 2014	September 2014	Total	
1	2	3	4	5	6	7=4+5+6	8=2-(3+7)
Salaries	\$4,341,846	\$994,898	\$78,091	\$67,034	\$75,307	\$220,432	\$3,126,516
Fringe Benefits	\$2,290,897	\$436,127	\$160,400	\$22,149	\$24,615	\$207,165	\$1,647,606
Overhead	\$3,056,031	\$740,554	\$47,012	\$41,602	\$48,114	\$136,728	\$2,178,749
Travel and Transportation	\$235,708	\$57,172	\$1,825	\$6,637	\$8,126	\$16,588	\$161,948
Allowances	\$572,622	\$363,755	\$26,411	\$33,558	\$18,751	\$78,720	\$130,148
Other Direct Costs	\$2,807,397	\$533,867	\$30,195	\$36,968	\$199,460	\$266,623	\$2,006,908
Equipment, Vehicles and Freight	\$580,444	\$389,438	\$1,441	\$385	\$657	\$2,484	\$188,523
Training	\$567,739	\$150,510	\$3,091	\$18,918	\$28,612	\$50,621	\$366,608
Subcontractors	\$950,064	\$222,808	\$8,857	\$10,701	\$10,989	\$30,546	\$696,710
Strategic Activities Fund	\$3,200,000	\$445,191	\$66,680	\$196,521	\$79,958	\$343,159	\$2,411,651
General and Administrative	\$1,025,011	\$219,750	\$38,583	\$26,677	\$30,368	\$95,628	\$709,634
Fixed Fee	\$1,364,130	\$316,508	\$30,341	\$32,050	\$36,484	\$98,875	\$948,747
TOTAL ESTIMATED COST PLUS FIXED FEE	\$20,991,889	\$4,870,576	\$492,927	\$493,199	\$561,440	\$1,547,566	\$14,573,747